

# KERALA STATE RUBBER CO-OPERATIVE LTD.

(Rubco Rubberised Coir Mattress Factory)

Rubco Nagar, Poothakuzhi. P.O, Pampady, Kottayam-686 521, Ph: 91-481-2509257/58, 04812509295, Fax: 91-481-2509258, Toll Free No: 18004259295 E-mail:inforcm@rubcomail.com, www.rubcogroup.com



RUB/RCM/P&A/TPER-02/292-A/249

#### CERTIFICATE

This is to certify that Ms.PUSHPA P. SUSAN, MBA Student of Andhra Loyola Institute of Engineering & Technology, Vijayawada-5200008 has undergone a Project Study on *Training & Development* as a part of her curriculum, at our Rubberised Coir Mattress Division during the month of June 2017.

During the tenure of her study, we found her attentive in her assignments.

For KERALA STATE RUBBER CO-OPERATIVE LTD.

P.C.AJITH KUMAR ADM.CUM PERSONNEL OFFICER



Date: 21.03.2018



# CERTIFICATE OF INTERNSHIP

This is to certify that Ms. GARIKPATI SURAGA SUMA a student of 2<sup>nd</sup> year MBA, Andhra Layola Institute of Engineering & Technology, VIJAYAWADA having REG.NO.16HP1E00017 has successfully completed her internship in RAMAKRISHNA HOUSING (P) LIMITED, Vijayawada, from 01<sup>st</sup> June 2017 to 15<sup>th</sup> July 2017.

During the internship the student had been exposed to the "A Study on Recruitment & Selection Process."

The student had been imparted on job training on various functional areas under the guidance of Head Hr. Mr.Sethumadhavayya.

For Ramakrishna Housing (P) Limited,

HR Department.

Note: This Internship and the certification is purely knowledge oriented and doesn't confer any right for any kind of employment in our organization.



# **RCI Logistics Pvt. Ltd**

(An ISO 9001: 2008 Certified Company)

CIN - U60231TG2001PTC064387

RCI/HO/17-18/32

Date: 29 June 2017

#### TO WHOM IT MAY CONCERN

This is to certify that Mr. Bharath Teja G, a student of MBA - Major in Human Resource Management, Andhra Loyala Institute of Engineering and technology, Vijayawada, successfully completed one months internship programme at this company from 29th May, 2017 to 29<sup>th</sup> June, 2017. During the period of his internship programme with us he was found punctual, hard working and inquisitive.

We wish him all the success.

Thanks & Regards
For RCI Logistics

K. Jyosna HR Manager







# **BOOK LINKS**

D.No. 31-13-18, Danaiah Street, Machavaram, VIJAYAWADA - 520 004. Ph: 0866 - 2436959, Cell: 94919 62759

TIN No.: 37513252070

Ref.

Date 15-03-2018

# CERTIFICATE

This is to certify that Ms. KOLIPAKULA VENKATA SAI LAKSHMI of Andhra Loyola Institute of Engineering and Technology, Vijayawada, Krishna District. Affiliated to Jawaharlal Nehru Technological University, Kakinada. Register No: 16HP1E0022 has done her academic project work in our accounts and finance section and has submitted "WORKING CAPITAL MANAGEMENT" in S.R. BOOK LINKS, Vijayawada. She's worked with us for a period from 02-06-2017 to 16-07-2017.

Throughout her association with us, her conduct is found to be satisfactory.

We wish her every success in all her future endeavours.

For S. R. BOOK LINKS

Managing Partner



# भारत सरकार/ GOVERNMENT OF INDIA

केंद्रीय लोक - निर्माण विभाग CENTRAL PUBLIC WORKS DEPARTMENT शहरी विकास मंत्रालय Ministry of Urban Development

कार्यपालक अभियंता के कार्यालयOffice of the Executive Engineer विजयवाड़ा केन्द्रीय महल Vijayawada Central Division



0866-2550219, Fax: 0866-2552420 email: eevjcd@gmail.com

Dt: 01.06.2018

### TO WHOM SOEVER IT MAY CONCERN

This is to certify that Mr. Ch. Dheeraj (Reg. No. 15HP1A0122), a student of B.Tech (Civil Engineering) Andhra Loyola Institute of Engineering and Technology affiliated to Jawaharlal Nehru Technological University, Kakinada, Andhra Pradesh has successfully completed during the month of May-2018 internship programme in the Office of Executive Engineer, Vijayawada Central Division, Central Public Work Department, Vijayawada. During the period of his internship programme with us he was found punctual hardworking and inquisitive.

We wish him every success in life.

कार्यपालक अभियंता Executive Engineer विजयवाड़ा केन्द्रीय मंडल Vijayawada Central Division

के.लो.नि.वि Central PWD, विजयवाड़ा Vijayawada-7



# GRAND PROJECT LLP

Office Address: Phone No:927777999 vijayawada Email:info@grandproject.in

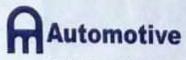
#### TO WHOM IT MAY CONCERN

This is to certify that Mr.J.JOJIBABU bearing registered number15HP1A0126, a student of B'tech (civil) at ANDHRA LOYOLA INSTITUTE OF ENGG AND TECHNOLOGY, Vijayawada has successfully completed 06(six) months (from 21st february, 2018 to 24st august, 2018) long internship programme at this Grand project by Capitol. During the period of his programme with us he was found punctual, hardworking and inquisitive.

We wish him every success in life For Grand project LLP



Authorized signature



PAN No. : AAACA3428K GSTIN : 37AAACA3428K1ZQ CIN : U34100MH1948PTC006781



BM:Estt/PW/091 05:06:2018

#### TO WHOMSOEVER IT MAY CONCERN

This is to certify that Mr. Ch. Bharadwaj, student of B.Tech Mechanical Engineering with Registration No: 15HP1A0370 from ANDHRA LOYOLA INSTITUTE OF ENGINEERING & TECHNOLOGY, Vijayawada, Krishna Dist., has undergone internship in this Organization from 15.05.2018 to 31.05.2018, as a part of his Course curriculum. He carried out a study on "ENGINE AND CHASSIS ASSEMBLY" for Ashok Leyland Vehicles.

The report submitted by Mr. Ch. Bharadwaj at the end of the internship has been informative.

His performance and conduct during the Training period had been Good and we wish him all the success in his future endeavors.

**Automotive Manufacturers Pvt Ltd** 

V.Venkateswara Rao Branch Manager



ANDHRA LOYOLA INSTITUTE OF ENGINEERING AND TECHNOLOGY, VIJAYAWADA

Title: Industrial Visit

Date(s): 2<sup>nd</sup> year student's industrial visit at Kumar pumps, Tenali ON 02.09.17-

10.00AM - 04.00PM

**Industry Visited:** 

Kumar pumps, Pvt Limited Tenali

Participant's:

MECH II YEAR STUDENTS The student's team consisting of 60 Students will be lead by

TWO Faculty Members.

**Description about the Visit:** 

MECH II YEAR STUDENTS visited The Krishna District Prathap Industries Kumar

pumps, Pvt Limited, Tenali as part their academic activity. Real time field visit will enhance

the student's exposure to production processes.

The present visit helped the students to know about Modeling, casting, machining,

joining, shearing and forming processing practices.

Faculty accompanied: Mrs. B. Susmitha and Mr. J. N. Pavan Sai

**Designation(s):** Assistant Professor

**Department:** Department of Mechanical engineering

# **Glimpses of Industrial Visit:**



Industrial Visit - at the entrance Mechanical II semester students along with Faculty.

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Title: Industrial Visit

Date(s): Industrial visit at Coco cola PVT Limited, Atmakur ON 17-02-2017- 10.00AM –

04.00PM

**Industry Visited:** 

Coco cola PVT Limited, Atmakur

#### Participant's:

MECH II YEAR STUDENTS The student's team consisting of 60 **Students** will be lead by TWO Faculty Members.

#### **Description about the Visit:**

MECH II YEAR STUDENTS visited The Krishna District Industrial visit at Coco cola PVT Limited, Atmakur as part their academic activity. Real time field visit will enhance the student's exposure to production processes.

The present visit helped the students to know about Quality Assurance, Preeforms, Blow moulding, Labelling, Packaging, processing practices.

Faculty accompanied: Mr. E. Durgesh and Mr. S P K. Krishna Mithra

**Designation(s):** Assistant Professor

Department: Department of Mechanical engineering

# Glimpses of Industrial Visit:



Industrial Visit - at the entrance Mechanical II semester students along with Faculty.

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# DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

#### INDUSTRIAL VISIT

INDOSTRIAL VISIT
Title: Industrial Visit
Date(s): 23-24 AUG 2017- 10.00AM – 01.00PM
Industry Visited: 33 TO 11 KV SUBSTATION
Participant's:
II EEE 64 students and Two faculty members
Description about the Visit:
EEE II Year II semester students visited TO 11 KV SUBSTATION, Vijayawada as
part their academic activity. Real time field visit will enhance the student's exposure to
production processes and management practices.
Depart Submitted by Mr. T. Vrighne Mohan and Mr. M. Dema Vrighne
Report Submitted by: Mr. T Krishna Mohan and Mr. M. Rama Krishna
<b>Designation(s):</b> Assistant Professor & Assistant Professor
Department: Department of EEE
Climpses of Industrial Visit



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# DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

#### **INDUSTRIAL VISIT**





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#### DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

#### **INDUSTRIAL VISIT**



Industrial Visit – 23-24 AUG 2017at the entrance EEE III year II semester students along with Faculty

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DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

#### **INDUSTRIAL VISIT**

# RENEWABLE ENERGY SOURCES LAB @ ALC

The department of Electrical Engineering organized a visit to **RENEWABLE ENERGY SOURCES LAB** at Andhra Loyola College, Vijayawada, on 21<sup>st</sup>& 24<sup>th</sup> of August 2017 for the students of II EEE. The objective of this visit is to understand the basic concepts of power generation by solar, wind, and hydropower systems. The visit made them look beyond books and provided what classrooms could never have. They were accompanied by Mr. M. Rama Krishna, Asst. Prof., Mr. M. Krishna Mohan, Asst. Prof. and Mr. K. Rajesh Babu, Asst. Prof. who were extremely interactive.

The students stated that the programme highlighted the basic concepts of power generation by renewable energy sources like solar, wind etc. They also learnt about the utilization power generated by renewable energy sources.



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#### DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

#### **INDUSTRIAL VISIT**

Title: Industrial Visit

**Date(s):** 21<sup>st</sup> Feb. 2018- 10.00AM – 04.00PM

Industry Visited: Dr. Narla Tata Rao Thermal Power Station (NTTPS), Ibrahimpatnam

#### Participant's:

II EEE 70 students and Two faculty members

#### **Description about the Visit:**

EEE II Year II semester students visited Dr. Narla Tata Rao Thermal Power Station (NTTPS) as part their academic activity. Real time field visit will enhance the student's exposure to production processes and management practices.

The main motto of this visit is to make the students understand the generation of Electricity from coal. The visit was very fruitful as they observed each of energy conversion stages used in power plant starting from fuel section to switch yard. All the students were actively participated and many of their doubts were cleared by the discussion with experts of the plant.

Report Submitted by: Mr. M Rama Krishna and Mr. T Krishna Mohan

**Designation(s):** Assistant Professor & Assistant Professor

**Department:** Department of EEE



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#### DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

#### **INDUSTRIAL VISIT**

Glimpses of Industrial Visit:

# థర్త్తల్ప్ పవర్ ప్లాంట్ ను

# సందర్శించిన విద్యార్థులు

ఆటోనగర్: ఆంధ్రలయోలా కళాశాల ఎల్మక్టికల్, ఎల క్టానిక్స్ ద్వితీయసంవత్సరం విద్యార్థులు బుధవారం కొండపల్లిలోని థర్మల్ పవర్ ప్లాంట్*ను సందర్శించారు.* పవర్షాంట్ అధికారులు విద్యార్థులకు ప్లాంట్ విష యాలను వివరించారని ఇంజినీరింగ్ కళాశాల అధ్యాప కుడు వై.సి.అశోక్ కుమార్ తెలిపారు. మొత్తం 70 మంది విద్యార్థులు పాల్గొన్నారు. కార్యక్రమంలో అధ్యా పకులు పాల్గొన్నారు.



Thu, 22 February 2018 epaper sakshi.com//c/26472541



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# DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

#### **INDUSTRIAL VISIT**



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#### DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

#### **Industrial Visit Report**

Title: Industrial Visit

Date(s): 05-12-2017

Industry Visited: EURTH TECHTRONICS PVT LTD., ALEAP, Surampally

Participants:

II B. Tech ECE-1, I Semester 60 students and Two faculty members

#### **Description about the Visit:**

Eurth Techtronics Pvt Ltd (EURTH) is a manufacturing company specialized in Electronics Manufacturing Service, LED lightings and clean energy saving services. The Company caters to both domestic as well as international markets. The wide range of products enables to offer solutions across industries like Domestic, Corporate and Retail, Automotive, Telecom, Consumer Electronics, Power Electronics, etc. and this strategy of The Company helps to gain a remarkable value and good will in and among a large number of Startup companies. EURTH TECHTRONICS PVT.LTD uses various types of latest technological machines to manufacture their products. The company uses different machines like LED fixing machine, pre fixed component on printed board soldering machine, pre testing machine, etc., A team of 60 students along with 3 faculty members has visited the industry to know and understand the industrial process of manufacturing and assembling LED lamps. This gives an insight into the industrial processes and working environment and safety measures adopted



II B. Tech ECE Students at Eurth Techtronics, Surampally



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#### DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

#### **Industrial Visit Report**

Title: Industrial Visit

Date(s): 27-01-2018

Industry Visited: Efftronics Systems PVT Ltd., 40-15-9, Brindavan Colony, Vijayawada-520010,

Phone: 0866-2483380

#### Participants:

III B. Tech ECE II Semester 60 students and Two faculty members

#### **Description about the Visit:**

An industrial visit has been organized by department of ECE for the III year ii semester students on 27<sup>th</sup> January 2018. The main objective of the visit was to provide a technical exposure to the students about PCB designing & technology. 60 students of iii year ECE along with 2 faculty members of the department has visited the industry. Efftronics provide solutions for smart-signalling, smart-buildings IoT-solutions, smart-cities, smart-water, smart-environment, smart-street-lighting, variable-message-sign-displays, wireless-traffic-control-system, online-distributed-appliance-control and bus-estimation-display-system etc.,



III B. Tech ECE II Students with Faculty of the department at Efftronics Entrance



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#### DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

#### **Industrial Visit Report**

Title: Industrial Visit

Date(s): 20-01-2018

Industry Visited: Efftronics Systems PVT Ltd., 40-15-9, Brindavan Colony, Vijayawada-520010,

Phone: 0866-2483380

#### Participants:

III B. Tech ECE II Semester 60 students and Two faculty members

#### Description about the Visit:

An industrial visit has been organized by department of ECE for the III year ii semester students on 20<sup>th</sup> January 2018. The main objective of the visit was to provide a technical exposure to the students about PCB designing & technology. 60 students of iii year ECE along with 2 faculty members of the department has visited the industry. Efftronics provide solutions for smart-signalling, smart-buildings IoT-solutions, smart-cities, smart-water, smart-environment, smart-street-lighting, variable-message-sign-displays,wireless-traffic-control-system,online-distributed-appliance-control and bus-estimation-display-system etc.,





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# DEPARTMENT OF CIVIL ENGINEERING

# **Industrial Visit Report**

Title: Industrial Visit
<b>Date(s):</b> 26stJuly, 2017-10.00AM – 4.00PM
Industry Visited: Sewage Treatment Plant, Ajithsingh Nagar, Vijayawada
Participant's:
IV Year I Semester 60 students and Two faculty members
Description about the Visit:
❖ IV B.Tech students were taken to Sewage Treatment Plant, Ajithsingh Nagar, Vijayawada for practical exposure on Treatment process of Waste water and testing of treated water samples in Laboratory on 26 <sup>th</sup> July 2017.
Report Submitted by: Mr. G.Lenin Reddy, Mrs.M.Alekya
Designation(s): Associate Professor, Assistant Professor
<b>Department:</b> Department of Civil Engineering
Glimpses of Industrial Visit:



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#### DEPARTMENT OF CIVIL ENGINEERING





IV Yr students were taken to Sewage Treatment Plant, Ajithsingh Nagar, Vijayawada

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# DEPARTMENT OF CIVIL ENGINEERING

# **Industrial Visit Report**

Title: Industrial Visit
<b>Date(s):</b> 24 <sup>th</sup> August , 2017- 10.00AM – 12.00AM
Industry Visited: School of planning and architecture
Participant's:
III & IV Yr students and Two faculty members
Description about the Visit:  ❖ III and II B.Tech students were taken to School of Planning & Architecture, Vijayawada for practical exposure of Super Structures (Finishing like Plastering, Flooring, Elevation(Façade) etc of Auditorium) on 24 <sup>th</sup> August 2017.
Report Submitted by: Mr. G.Lenin Reddy, Mrs.M.Alekya
Designation(s): Assistant Professor, Assistant Professor
Department: Department of Civil Engineering
Glimpses of Industrial Visit:



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III and II B. Tech students were taken to School of Planning & Architecture, Vijayawada

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#### DEPARTMENT OF CIVIL ENGINEERING

#### **Industrial Visit Report**

Title: Industrial Visit

Date(s): 24th Febrauary, 2018-10.00AM - 4.00PM

Industry Visited: RMC- Ultra tech Cements, Vijayawada

#### Participant's:

III Year II Semester 60 students and Two faculty members

#### Description about the Visit:

III Year II Semester visited RMC- Ultra tech Cements, Vijayawada as part their academic activity.

Real time field visit will enhance the student's exposure to practical knowledge

The present visit helped the students to know about the manufacturing of cement and different types of concrete used in the field, mix proportioning of concrete. The staff in the ultra tech cements explained and showed the manufacturing of cements and some of the techniques used in the proportioning of concrete.

Report Submitted by: Mr. G.Lenin Reddy, Mrs. M.Alekya



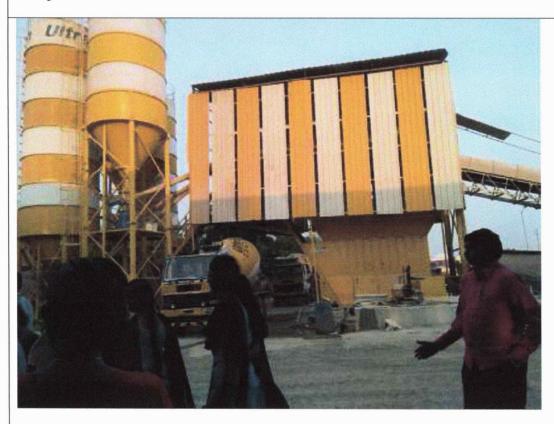
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#### DEPARTMENT OF CIVIL ENGINEERING

**Designation(s)**: Assistant Professor, Assistant Professor

**Department:** Department of Civil Engineering

Glimpses of Industrial Visit:



 $\label{localization} Industrial\ Visit-24.02.2018\ at\ RMC-\ Ultra\ tech\ Cements, Vijayawada \\ Civil\ III\ year\ II\ semester\ students\ along\ with\ Faculty$ 



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#### DEPARTMENT OF CIVIL ENGINEERING



Industrial Visit – 24.02.2018 at RMC- Ultra tech Cements, Vijayawada Civil III year II semester students along with Faculty

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#### **DEPARTMENT OF Computer science and Engineering**

#### **Industrial Visit Report**

Title: Industrial Visit

Date(s): 15<sup>th</sup> February 2017, Time: 10.00AM - 4.00PM

Industry Visited: BSNL, VIJAYAWADA

#### Participant's:

B.Tech IV Year II Semester 120 students and four faculty members

#### Description about the Visit:

B.Tech IV Year II Semester visited BSNL Vijayawada as part their academic activity. Real time field visit will enhance the student's exposure to Real time Work Environment.

Practical exposure for doing things makes a person conversant to the technicalities involved in any job. In view of such benefits, imparting of vocational training has been made an integral part of any academic structure.

In B.S.N.L., training is given to Engineering Aspirants to secure future in the dynamic world of telecommunications. Today telecommunication industry is one of the very fastest growing industries in the world.

In the open economy era of fast modernization and tough competition, technical industries should procedure pass out as near to job function as possible.

Practical training is one of the major steps in this direction. Student training from BSNL, M.G Road, Vijayawada which is one of the best known communication service provider in Vijayawada.

This training helped students in gaining in depth knowledge of the working of telephone



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#### **DEPARTMENT OF Computer science and Engineering**

exchange, various technologies of BSNL -GSM, GPRS, WIMAX, Wi-Fi, MLLN and optical fiber transmission.

Report Submitted by: Dr.Ali Hussain& Mr.T.Srinivas

Designation(s): Assistant Professor

Department: Department of Computer science and Engineering

**Glimpses of Industrial Visit:** 







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**DEPARTMENT OF Computer science and Engineering** 

#### **Industrial Visit Report**

Title: Industrial Visit

Date(s): 15th Febraury, 2018-10.00AM - 4.00PM

Industry Visited: EPSOFT TECHNOLOGIES, MEDHA HITECH CITY, GANNAVARAM IT

PARK, VIJAYAWADA

Participant's:

B.Tech IV Year II Semester 120 students and four faculty members

**Description about the Visit:** 

B.Tech IV Year II Semester visited **EPSOFT TECHNOLOGIES**, **MEDHA HITECH CITY,GANNAVARAM IT PARK**, Vijayawada as part their academic activity. Real time field visit will enhance the student's exposure to Real time Work Environment and understands different phases in software Engineering.

The present visit helped the students to know about Real time Work Environment, Programming, Testing ,deployment and Maintenance Activities Performed in a software Company.

Report Submitted by: Mr. Y.Rajesh& Mr.K.Siva Rama Krishna

**Designation(s):** Assistant Professor



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**DEPARTMENT OF Computer science and Engineering** 

Department: Department of Computer science and Engineering

Glimpses of Industrial Visit:



Industrial Visit – 15.02.2018 at the entrance B.Tech IVyear II semester students along with Faculty



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**DEPARTMENT OF Computer science and Engineering** 



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### DEPARTMENT OF BUSINESS ADMINISTRATION

# Industrial Visit to ALEAP Industrial Estate, Surampalem, Nunna, Krishna District, Andhra Pradesh

Title: Industrial Visit To ALEAP Industrial Estate, Surampalem, Nunna, Krishna District, Andhra

Pradesh

**Date(s):** 27<sup>th</sup>September, 2017-10.30AM – 02.00PM

Venue: ALEAP Industrial Estate, Surampalem, Nunna, Krishna District, Andhra Pradesh

### Participant's:

49 Students of II MBA(2016-2018 BATCH) and 2Faculties from Department of Master of Business Administration, ALIET.

### **Description about the Visit:**

Industrial visit has its own importance in a career of a student who is pursuing professional courses like MBA. Industrial visit helps to combine theoretical knowledge with practical knowledge. The objective this industrial visit is to provide students an insight regarding internal working of companies. It provided them with an opportunity to learn practically through interaction, working methods and employment practices. It gavethem an exposure to current work practices.

Forty nine students along with two faculties from department of Master of Business Administration reached the company around 10.30 AM by college bus. Mr.Balaji, who is working as Estate Managerreceived there. After giving instructions he accompanied students to visit the factory each division wise. The entire visit gave a wonderful experience to the students in learning practical side of the industrial management.

Report Submitted by: Mr.N.Janardhanarao and Mrs. P B Lavanya.

**Designation(s)**: Associate Professor and Assistant Professor,

Department: DepartmentMaster ofBusiness Administration



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### DEPARTMENT OF BUSINESS ADMINISTRATION

### Glimpses of the visit:









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### DEPARTMENT OF BUSINESS ADMINISTRATION

Industrial Visit to Jayalakshmi Oil and Chemical Industries Limited, Dokiparru, Guntur, Andhra Pradesh.

Title: Industrial Visit to -Jayalakshmi Oil and Chemical Industries Limited, Dokiparru, Guntur, Andhra

Pradesh.to provides students an insight regarding internal working of companies.

Date(s): 24<sup>th</sup>October, 2017-10.30AM - 02.00PM

**Venue:** Industrial Visit to Jayalakshmi Oil and Chemical Industries Limited, Dokiparru, Guntur, Andhra Pradesh.

### Participant's:

56 Students of II MBA (2017-2019 batch) and 2Faculties from Department of Master of Business Administration, ALIET.

### Description about the Visit:

Industrial visit has its own importance in a career of a student who is pursuing professional courses like MBA. Industrial visit helps to combine theoretical knowledge with practical knowledge. The objective this industrial visit is to provide students an insight regarding internal working of companies. It provided them with an opportunity to learn practically through interaction, working methods and employment practices. It gavethem an exposure to current work practices.

Fifty six second year students along with three faculties from department of Master of Business Administration reached the company around 10.30 AM by college bus. Mr.R.BanerjeeBabu,Sr.General Manager - who is working as Production Manager received there. After Introduction All The Students Were headed by the manager of the company who helped us to understand how production is carried out in the company .Maximum Production is carried out by means of machinery sub-divided into various activities like inception of raw materials, mixing process and then converting into finished goods. The entire visit gave a wonderful experience to the students in learning practical side of the industrial



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Vijayawada – 520 008 DEPARTMENT OF BUSINESS ADMINISTRATION

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management.





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### DEPARTMENT OF BUSINESS ADMINISTRATION

### Glimpses of the visit:



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Vijayawada - 520 008

DEPARTMENT OF BUSINESS ADMINISTRATION

Industrial Visit to The Krishna District Milk Producers Mutually Aided Co-Operative Union Limited, Vijayawada

**Title:** Industrial Visit to - The Krishna District Milk Producers Mutually Aided Co-Operative Union Limited, Vijayawada to provides students an insight regarding internal working of companies.

Date(s): 07th May, 2018-10.30AM - 02.00PM

Venue: Industrial Visit to The Krishna District Milk Producers Mutually Aided Co-Operative Union Limited, Vijayawada

### Participant's:

51 Students of I MBA (2017-2019 batch) and 4 Faculties from Department of Master of Business Administration, ALIET.

### **Description about the Visit:**

Industrial visit has its own importance in a career of a student who is pursuing professional courses like MBA. Industrial visit helps to combine theoretical knowledge with practical knowledge. The objective this industrial visit is to provide students an insight regarding internal working of companies. It provided them with an opportunity to learn practically through interaction, working methods and employment practices. It gave them an exposure to current work practices.

Fifty one second year students along with four faculties from Department of Master of Business Administration reached the company around 10.30 AM by college bus.

### **Description about the Visit:**

MBA I Year II semester students visited The Krishna District Milk Producers' Mutually Aided Co-Operative Union Limited, Vijayawada as part their academic activity. Real time field visit will enhance the student's exposure to production processes and management practices. The present visit helped the students to know about milk processing, milk drying, ghee manufacturing, butter manufacturing, UHT milk packing, butter cold storage and warehouse practices.



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DEPARTMENT OF BUSINESS ADMINISTRATION

### Glimpses of the visit:







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### Vijayawada – 520 008

### DEPARTMENT OF BUSINESS ADMINISTRATION

### Industrial Visit to ALEAP Industrial Estate, Surampalem, Nunna, Krishna District, Andhra Pradesh

Title: Industrial Visit To ALEAP Industrial Estate, Surampalem, Nunna, Krishna District, Andhra

Pradesh

**Date(s):** 07-05-2018, 12.30AM – 02.00PM

Venue: ALEAP Industrial Estate, Surampalem, Nunna, Krishna District, Andhra Pradesh

Participant's:51 Students of I MBA(2017-2019 BATCH) and 4Faculties from Department of Master of

Business Administration, ALIET.

### Description about the Visit:

Industrial visit has its own importance in a career of a student who is pursuing professional courses like MBA. Industrial visit helps to combine theoretical knowledge with practical knowledge. The objective this industrial visit is to provide students an insight regarding internal working of companies. It provided them with an opportunity to learn practically through interaction, working methods and employment practices. It gavethem an exposure to current work practices.

Fifty one students along with Four faculties from Department of Master of Business Administration reached the company around 12.30 PM by college bus. Mr.Balaji, who is working as Estate Managerreceived there. After giving instructions he accompanied students to visit the factory each division wise. The entire visit gave a wonderful experience to the students in learning practical side of the industrial management.

Report Submitted by: Mr.N.Janardhanarao, Mrs. P B Lavanya, Mrs.V.Nagalakshmi,

Designation(s): AssociateProfessor, Assistant Professor, Assistant Professor

**Department:** DepartmentMaster ofBusiness Administration

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Vijayawada – 520 008

### DEPARTMENT OF BUSINESS ADMINISTRATION

### Glimpses of the visit:





## MARIS STELLA COLLEGE (Autonomous)

VIJAYAWADA - 520 008, Krishna Dist., A.P.

Phone No. 2472332, Fax : (0866) 2479181

e-mail: mscvja@gmail.com

office@marisstella.ac.in website: www.marisstella.ac.in

Date: 21.11.17

### ATTENDANCE CERTIFICATE

This is to certify that Mrs M. Mohana Deepthi, Assistant Professor, Department of CSE, Andhra Loyola Institute of Engineering and Technology, Vijayawada trained the faculty of Computer Science Department of our college on Cloud Computing from 16th August 2017 to 21st September 2017 (8 hours approximately).

We are thankful for your support and expect the same in future.

PRINCIPAL

1. h.M.

MARIS STELLA COLLEGE . VIJAYAWADA- 520 008



### MARIS STELLA COLLEGE (Autonomous)

VIJAYAWADA - 520 008, Krishna Dist., A.P.

Phone No. 2472332, Fax: (0866) 2479181

e-mail: mscvja@gmail.dom

office@marisstella.ac.in

website: www.marisstella.ac.in

Date: 21.11.17

### ATTENDANCE CERTIFICATE

This is to certify that K Siva Rama Krishna, Assistant Professor, Department of CSE, Andhra Loyola Institute of Engineering and Technology, Vijayawada trained the faculty of Computer Science Department of our college on Hadoop Programming from 16<sup>th</sup> August 2017 to 18<sup>th</sup> November 2017 (20 hours approximately).

We are thankful for your support and expect the same in future.

PRINCIPAL

MARIS STELLA COLLEGE

VIJAYAWADA-520 008

## J.M.J. COLLEGE FOR WOMEN, TENALI.

PRIVATE AIDED - MINORITY INSTITUTION (AUTONOMOUS)

Re-accredited by NAAC with B Grade (3rd Cycle)

From:

The Principal / Correspondent J.M.J. COLLEGE FOR WOMEN Morrispet, TENALI - 522 202.



Phone: 08644 - 225994 (O)

08644 - 227994 (O)

: 08644 - 229428 (R)

Fax : 08644 - 222458

E-mail: jmjtenali@gmail.com

Website: jmjcollege.ac.in

Date 27-02-2018

### **CERTIFICATE**

This is to certify that Mr. Sivaramakrishna Kosuru from department of CSE, Andhra Loyola Institute of Engineering and Technology (ALIET), Vijayawada has given Guest Lecture for Final Degree B.Sc Students on the topic "Big Data Technology – HADOOP" with practical demonstration for five days in JMJ College for Women(Autonomous), Tenali.

(Dr. Sr. Shiny.K.P.)

Principal

JMJ College for Women (Autonomous) TENALI - 522 202 The Principal Andhea Loyola College, Vijayawada.

Vijayawada Dr apoli7,

Sub: Request for wing the equipment for negd,

Respected Sir,

I P. Harika 884 Dept of ALIET, and also Research Scholar of Andhea Loyda Collège of have registéred Ph.D peogramme under the guidance of Dr. G. V. Romana (HOD). Department of chemistey ALC. I would like to work on Rotary Evaporator which is available in Botany Dept of ALC. I request you to grant me premission to use the equepment I schall handouer the equipment in a condition as I received after completion of my work.

Thanking you,

Pei As

Yours faithfully P. flaules [P. HARIKA] 32+1 Dept [chem ALIET.

12/4/17, Vijayawada.

The Director, Andhea Loyola Institute of Engg & Tech, Vijayawada - 08.

Respected Father,

Subject - Requesting for permission - Reg

I am K. Skowautti working vas Asst-Professor in the dept of SEH (Physics). I am doing my research work under the guidance of Dr. G. Sahaya Baskaran sie, Dept. of Physics, Andhra Loyda collège, V2A.

I request you to permit me during free hours to A.L.c to pursue my research work.

Thanking you,

ANDHRA LOVING
BNGINELEING
VIJAVIAVA

Only when you are from

Lovi Komi

G. Sahanja Bas Karan Dept. Of SEH,

ALIET.

yours sincerely



Code College Secretary Principal Fax

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VIJAYAWADA - 520 008.

To.

The Dean of Engineering & Technology, Vignan University, Vadlamudi,

Sub: Request to permit to do Experimental Work-Regards

Dear sir

Mr.K. Pandurangarao working as Assistant Professor of Physics in S&H Department in our college for past five years. According to him, his work is at the final stage. For this he needs "Thinfilm Sputtering unit" for carrying out his work. That equipment is not available with us, and we came to know that it is available in your "Thinfilm Laboratory". We request you to permit him to carry his remaining work.

Thanking you.

Your Sincerely

ANDHRA LOYOLA INSTITUTE
ENGINEERING AND TECHNOL
VIJAYAWADA-5200



### GLOBAL JOURNAL OF COMPUTER SCIENCE AND TECHNOLOGY: F GRAPHICS & VISION

Volume 17 Issue 2 Version 1.0 Year 2017

Type: Double Blind Peer Reviewed International Research Journal

Publisher: Global Journals Inc. (USA)

Online ISSN: 0975-4172 & Print ISSN: 0975-4350

## A Novel Search Technique of Motion Estimation for Video Compression

By Pranob K Charles, Dr. Habibulla Khan & Dr. K.S. Rao

INTUH

Abstract- Video Compression is highly demanded now a days as due to the fact that in the field of entertainment, medicine and communication there is high demand for digital video technology. For the effective removal of temporal redundancy between the frames for better video compression Motion estimation techniques plays a major role. Block based motion estimation has been widely used for video coding. One such method is the Hierarchical Search Technique for BMA. By amalgamating the three different search algorithms like New three step search, New Full search and New Cross diamond search a novel hierarchical search methodology is proposed. Subsampling the original image into additional two levels is done and thereby the New Diamond search algorithm and a new three-step search algorithm are used in the bottom two levels and the Full Search is performed on the highest level where the complexity is relatively low. In terms of PSNR with reduced complexity this new proposed algorithm showed better performance.

Keywords: hierarchical search, motion estimation, PSNR, new cross diamond search, new three step search, BMA.

GJCST-F Classification: I.4.2, H.3.3



Strictly as per the compliance and regulations of:



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### GLOBAL JOURNAL OF COMPUTER SCIENCE AND TECHNOLOGY: F GRAPHICS & VISION

Volume 17 Issue 1 Version 1.0 Year 2017

Type: Double Blind Peer Reviewed International Research Journal

Publisher: Global Journals Inc. (USA)

Online ISSN: 0975-4172 & Print ISSN: 0975-4350

# Enhanced Logarithmic Search Technique for Motion Estimation with Three Step Reduction

By Pranob K Charles, Dr. Habibulla Khan & Dr. K.S. Rao

K L University Vijayawada

Abstract- Video compression is the one which has highest demand in the area of video processing. Motion estimation (ME) is the basic of Video compression. There are several algorithms to estimate the motion estimation of current block in reference frame. In the view of this a new novel technique has been proposed in namely Logarithmic Search with Three Step Reduction (LSTSR) which is computationally more efficient than many of the existing techniques. Simulation result shows that it performs better than that of Three Steps Search (TSS), New Three Step Search (NTSS) and reduces the checking points by almost 50% than that of TSS.

Keywords: motion estimation (ME); motion vector (MV); BMA; PSNR; TSS; NTSS.

GJCST-F Classification: I.3.7, I.4.8



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## **Development of Security in Intellectual Networks**

T.Kishore Babu<sup>1</sup>, Dr.GuruPrakash.C.D<sup>2</sup>

1,2 CSE Department

<sup>1</sup> Andhra Loyola Institute of Engineering and Technology, Vijayawada.
<sup>2</sup> Sri Siddhartha Institute of Technology, Maraluru, Tumakuru.

Abstract- There are security coercions in compromised machines which is used to spread malware and junk... The spamming doings and malware undertakings are the key to recruit cooperated machines, an effective Spamming and malware discovery system is generated to detect any cooperated machine on the network. RTOSP is called Part test of Sequential Possibility. The spam detection system monitors the departing messages which has error rates which can be bad and progressive. The detailed methodology has been discussed which captures the ip address of cooperated machines and detect the level of junk on the basis of their corresponding threshold values. Hence forth, we also achieve various security mechanisms verification, privacy, reliability, non-repudiation, and obtainability and contact services.

*Keywords*- RTOSP, Junk, zombies, security, virus, malware, Cooperated machine.

### I. INTRODUCTION

The most complex task is to work on uncompromised machines on network. The machines that are used spread various attacks such as spreading malware, virus and spamming which makes the hacker or attacker to use various machines on the internet, spotting and cleaning the threat on time is the most crucial task on the internet. RTOSP is used to detect the compromised machines on the network RTOSP is used to detect the threat machine Ratio test of Sequential Probability.RTOSP needs number of observations.Spam net is considered to be the most crucial threat. [1-2] Spam hunter has been created to capture all kinds of spam which includes various threats that includes virus worms and malware. These Spam net has been considered as a threat to attributes of information security. Due to increase of spam net congestion has been increased in the network. In existing system there is no mechanism which can detect the spam net in the cognitive network Based on the drawbacks of existing system a new framework has been proposed which includes six different modules which will detect the spam and mark them as compromised machines[3-6]. Based on the compromised machines the ip address have been recorded of the compromised machines and is considered as threat.

After detection RTOSP detection system compares the machines threshold level. Henceforth various attributes of information security have been applied on the RTOSP module [7-8].

In this research paper we develop a Spamming and malware detection system, named RTOSP, which monitors the outgoing messages. RTOSP is a statistical model called Ratio test of Sequential Probability (SPRT which has error rates that are positive and negative .In this system architecture different modules have been created. In RTOSP module firstly the IP address of different machines have been compared. Based on which there is a spam filter which filters the data either as spam or not spam [15]. The spam have been recorded as compromised machine which have been separated from Uncompromised machine. In the last module machines have been compared .The threshold activity is maintained in compromised machines. After the results that have been generated based on the analysis. These results have been analyzed on various attributes of information security [9-10]. The attributes of information security includes the following:

X Authentication x Confidentiality x Availability x Access Services x Non Repudiation x Integrity

In this paper, Section II represents the proposed mechanism and the Corresponding results are compared in Section III. Section IV concludes the paper.

### II. PROPOSED MECHANISM

\*Module 1: Interface-Interaction ModuleIn Interface-Interaction Module we create a system for end user login. In order to forward messages to other user all the machines have to logon to the network.

\*Module 2: RTOSP Module in the RTOSP Module all the IP address of each machine which sends a message is recorded and whenever a machine sends a spam messages continuously then it is considered as threat machine.

\* Module 3: Poll-Count Module (P-C) Poll Count Module is used to record the number of spam messages sent by each machine based on their IP address over a particular network.

Page | 791 www.ijsart.com

# Framework for Predictive Analytics as a Service S.Kishore Babu

Department of IT

ALIET, Vijayawada, India

using ensemble model Dr S.Vasavi Department of CSE, VRSEC

Vijayawada, AP, India

K.Nagarjuna II M.Tech, CSE, VRSEC Vijayawada, AP, India

Abstract-Cloud computing offers service delivery models that facilitate users during development, execution and deployment of workflows. In this Big-data era, Organizations require value out of big data. For this they need not have to deploy complex infrastructure, but can use services that provide value. As such there is a need for a flexible and scalable service called Predictive Analytics as a Service (PAaaS). Predictive analytics can forecast trends, determines statistical probabilities and to act upon fraud and security threats for big data applications such as business trading, fraud detection, crime investigation, banking, insurance, enterprise security, government, healthcare, e-commerce, and telecommunications Prediction algorithms can be supervised or unsupervised with different configurations, and the optimal one may be different for each kind of data. This paper summarizes existing service frameworks for big data and proposes PAaaS framework that can be used by business to deal with prediction in big data. This proposed framework is based upon ensemble model that uses best out of prediction algorithms such as Artificial Neural Networks (ANN), Auto Regression algorithm(ARX) and Gaussian process(GP).

Keywords—Big data; Predictive Analytics; Prediction algorithms; Performance Measures; Web service Framework

### I. INTRODUCTION

### A. Big data Characterstics

The initial characteristics of big data are Volume, Velocity Variety. Later Variability, Veracity, Visualization, Viscosity and Value are added resulting to 9V's of big data as shown in Fig. 1.

- 1. Volume refers to enormous data that is produced by people, sensors, devices, satellites. This data is measured initially in kilo bytes and now in Yotta Bytes.
- 2. Velocity refers to the speed at which this data is created, stored, processed and analyzed. Batch processing data such as annual sales may occur as batch processing where as stream data such as tweets from social media occurs per every second.

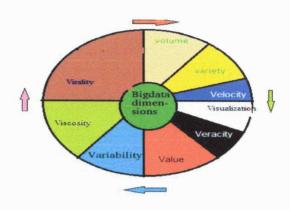


Fig. 1: Big Data and 9Vs [10]

- 3. Variety means, data occurs in various forms such as structured, semi-structured and unstructured. Each of these types of data requires different types of analyses or different tools to use. For example, on structured data we can perform OLAP operations. Semi structured data such as BiBTex files present data using tags, author, filename, year etc. This data can be analyzed to find co-author relationship. Unstructured data such as traffic sensor data can be analyzed to find dense and non dense roads.
- 4. Variability refers to data whose meaning is constantly changing depending on its context ranging from vertical to horizontal. For example word "bank" refers to financial bank or river bank.
- 5. Veracity refers to accuracy and tests for reliable source varying from certainty to uncertainty. Incorrect data analysis can cause damage to organizations as well as to consumers.
- 6. Visualization presents the data in a manner that is readable and accessible. These graphical formats range spreadsheets to three-dimensional visualizations.
- 7. Value refers to how important, worthy, usefulness of the data to those who are using it. The value depends on how the data is analyzed, converted into information and knowledge.
- 8. Viscosity specifies about the resistance to navigate within variety of data sources for data processing.
- 9. Virality measures the data speed across the network.







Received: 23 February 2017 Accepted: 28 July 2017 First Published: 09 August 2017

\*Corresponding author: K. Srinivasa Rao, Microelectronics Research Group, Department of ECE, K L University, Guntur, Andhra Pradesh, India E-mail: srinivasakarumuri@gmail.com

Reviewing editor: Meng Wei, Wuhan University of Technology, China

Additional information is available at the end of the article

### **ELECTRICAL & ELECTRONIC ENGINEERING | RESEARCH ARTICLE**

# Design and analysis of CPW based shunt capacitive RF MEMS switch

T. Lakshmi Narayana<sup>1,2</sup>, K. Girija Sravani<sup>3</sup> and K. Srinivasa Rao<sup>3\*</sup>

Abstract: This paper is about, the design and analysis of shunt capacitive RF MEMS switch with less actuation voltage, low insertion losses and high isolation losses. The switch design is incorporated the Electrostatics MEMS actuation technique with vertically deforming bridge. In terms of actuation voltage the switch performance is improved by choosing step type actuation structure with holes. The switch Radio Frequency (RF) performance is analysed over the frequency range from 0.6 to 40 GHz. The major achievements in this work are actuation voltage is reduced to 4.2 V for 0.9 µm displacement, the return loss is below –16 dB, the insertion loss is below –0.44 dB, and the isolation loss is –20 dB. The dielectric material used between the membrane and the CPW line is Aluminum Nitride (AlN) with dielectric constant 9.5. The substrate material used for the CPW transmission line is quartz with dielectric constant 3.9. The bridge is designed with meanders, step structure by using gold material with thickness 0.5 µm. The switch upstate capacitance is capacitance ratio of the shunt capacitive switch is 65.22.

Subjects: Technology; Design; Electromagnetics & Communication; Electronic Devices & Materials

Keywords: RF MEMS switch; CPW transmission line; pull-in voltage; up capacitance; down capacitance; MEMS actuation mechanisms; electrostatic MEMS actuation; insertion losses; isolation losses

K. Srinivasa Rao

### **ABOUT THE AUTHOR**

Dr K. Srinivasa Rao was born in Andhra Pradesh, India. He received Master's & PhD degree from Central University. He is presently working as a professor & head of Microelectronics Research Group, Department of Electronics & Communication Engineering in KL University, Guntur, Andhra Pradesh, India. His current research areas are MEMS actuators, Bio-MEMS, RF MEMS. He received Young Scientist Award from Department of Science & Technology, Government of India in 2011. He also received UGC Major Research Project in 2012. He received Early career research Award from SERB, Government of India in 2016. Presently he is working on MEMS project worth of 40 Lakhs funded by SERB, Government of India. He has published more than 94+ international research publications and presented more than 45 conference technical papers around the world. He is member of IETE, ISTE, and IEEE.

### **PUBLIC INTEREST STATEMENT**

RF MEMS Switches are mainly used to design the reconfigurable communication modules like antennas and filters. There are different types of RF MEMS switches i.e. series and shunt switches. Shunt switches has more operating frequency and offer high isolation. In this work we designed a shunt capacitive Radio Frequency (RF) operated MEMS Switch which offers more isolation, good insertion and requiring low actuation voltage. The switch is having good capacitance ratio. Here, the working of the proposed switch, if the membrane or beam is in upstate the switch is act like open circuit and RF in is equal to RF out, the the membrane is downstate switch is acts like closed circuit and RF in is equal to zero.







# Experimental Investigation on Optimization of the Controlling Factors for Machining Al 6061/MoS2 Metal Matrix Composites with Wire EDM

### M. Geeta Rani<sup>1\*</sup>, Ch.V.S.Parameswara Rao<sup>2</sup>, K.Rama Kotaiah3

1\* Research Scholar, Department of Mechanical Engineering,
Koneru Lakshmaiah Education Foundation(K.L), University, Vijayawada, Andhra Pradesh, India

<sup>2</sup> Professor, Department of Mechanical Engineering,
Narayana Engineering college, Gudur, Andhra Pradesh, India

<sup>3</sup> Professor, Department of Mechanical Engineering,
KKR & KSR Institute of Technology and Science, Vinjanampadu, Guntur, Andhra Pradesh, India

<sup>1</sup> Orcid: 0000-0002-3761-9718

### **Abstract**

The quality of a Wire EDM surface is strongly influenced by its parameter settings and material to be machined. In the present investigations, the effect of Wire electrical discharge machining (WEDM) parameters such as pulse-on time (T On), pulse-off time (TOff), peak current(Ip) and wire feed (Wf) on material removal rate (MRR) and surface roughness (Ra) in metal matrix composites (MMCs) consisting of Aluminium alloy (Al6061) and MoS2 is discussed. The Al6061 material is reinforced with MoS2 powder of 2 micron particle size with 4% weight ratio. The experiments are carried out based on design of experiments approach using L9 orthogonal array using CNC SPRINTCUT WEDM. The results were analyzed and optimized using analysis of variance and response graphs.

 $\begin{tabular}{ll} \textbf{Keywords:} & Al6061/\ MoS2 & MMC, & ANOVA\ , Optimization, \\ Response\ graph & , WEDM \\ \end{tabular}$ 

### INTRODUCTION

The WEDM is the focus of researchers and engineers especially in the field of dies, moulds, precision manufacturing, contour cutting etc. WEDM is a non-traditional process of material removal from electrically conductive materials to produce parts with intricate shape and profiles. The schematic view of WEDM process was shown in fig.1



Figure 1: Schematic view of experimental set up

MMCs are materials consisting of two or more constituent parts in which a metal is reinforced with high strength materials such as Sic, MoS2 etc in various proportions. This leads to MMCs with enhanced properties like high strength, high wear resistance etc. However, the reinforcement material in various forms (particulate, whiskers and continuous fibers) makes it difficult to machine using traditional machining methods due to its abrasive nature.

WEDM is considered as one of the most versatile process for machining intricate, complex shapes and difficult to machine materials . A number of research works has been carries out on different materials to study the influence of different process parameters . Al 6061 has the properties of high corrosion resistance, and good machinability. Because of these properties it is commonly used for construction of air craft structures such as wings and fuselages. In the present investigation, Aluminium alloy 6061 was used as the matrix material. Among the various Aluminium alloys, Aluminium alloy 6061 is typically characterized by properties such as fluidity, corrosion resistance, castability and high strength – weight ratio . When Aluminium matrix is reinforced with the hard ceramics particles like SiC, MoS2, Al2O3 and B4C etc its strength increases.

Tirumavalan, k et al [1] optimized the process parameters during machining of AA6061 by Severe Surface Mechanical Treatment (SSMT). By using Taguchi design of experiments the process parameters were optimized. ANOVA is used to analysis of the results. Sankara Narayanan G et al [2] investigated the effect of process parameters on the thickness of the work piece, time and wear and developed mathematical relationships using Artificial Neural Networks. From that they developed Algorithm for the input parameters and the processs parameters by using Wire Cut Electric Discharge Machining.

Ashish Srivastava , Amit Rai Dixit [3] presented an experimental study on composite of Al2024 reinforced with



# Predictive Analytics as a Service on Tax Evasion using Gaussian Regression Process

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#### Abstract

Predictive analytics combines the capabilities of statistical analysis, machine learning and data mining. Vast amount of unstructured data produced by various public and private sectors such as government, health insurance, social media and academics gave the way for text analytics to make an insight into finding risk. Predictive analytics can forecast trends, determines statistical probabilities and to act upon fraud and security threats for big data applications such as business trading, fraud detection, crime investigation, banking, insurance, enterprise security, government, healthcare. e-commerce, and telecommunications. Predictive analytics as a service (PAaaS) framework is proposed in our earlier works. This paper gives solution to one of the application fraud detection in income tax data. The solution is based upon ensemble model that uses Gaussian process with varying hyper parameters. Performance measures NRMSE and COD are used to analyse the model. Test results proved that the third hyper-parameter values yielded a good result with less error rate and more variance which is reliable for a predictive model.

**Keywords**—Predictive Analytics, Gaussian process, Data Transformation, Statistical Computing, Tax Administration

### I. INTRODUCTION

Data analytics uncover hidden patterns and correlations from large volumes of data by using techniques from statistics, machine learning, artificial intelligence and data mining. Predictive analytics (PA) refers to predictions such as customer relationship management, cross sell, healthcare insurance, risk management in banking, telecommunications, fraud detection about the future through analysis of data. Data analytics can be categorized into descriptive, predictive and prescriptive models. Descriptive models uses data aggregation to conclude upon what has happened, like mentioning the relationship between the data and describes past, predictive analytics that uses statistical models to forecast the future like what may happen and prescriptive analytics uses optimization techniques to suggest the ways of outcomes and their possible effects. Further predictive models can be categorized into classification models and regression models. Classification models determine class labels (categorical) where as regression models help in predicting a numeric value. Many techniques have been developed for

predictive modeling such as SVM, Bayesian methods, neural networks, regression models, k-NN, uplift models and decision trees. But ensemble models proved to be achieving good accuracy when compared to others, reason being, they train several similar models and combines results so that a best model can be derived to predict new data. As explained in [1], predictive models can find relationship between outcome and dependent variables. Similarly descriptive models are used to form clusters of objects with similar characteristics. There are six phases for predictive analytic process. In the initial phase project is defined with outcomes, objectives, scope and the deliverables from the project. In the next phase data is collected from various sources and is analyzed. This analysis requires strategies for preprocessing such as data cleaning, transformation and data modeling so that useful data is extracted for further processing. Subsequently validate the initial hypothesis using statistical models. The next phase is predictive modeling for forecasting the future. Results after implementation can be deployed for using it in the day to day decision making. The last phase is monitoring the model in order to ensure that it is providing the expected results.

Fraud detection is necessary for any financial system. Nowadays, some people are deceiving government by not paying the taxes correctly. A huge loss is being reported by the government. Government has no proper estimate of how much tax is to be collected from the people. If it has a proper observation of the taxes received from previous years, government can make decisions regarding, amount of taxes that should be collected. A proper estimate of these amounts can make the task of fraud detection easier. If we can reduce the fraud that is associated with the tax collection, there will be an increase in the income for the government, which can be used for development activities. So the fraud can be detected by extracting the insights from the data which is discussed in this paper. This paper focus on the computing layer of our framework described in [2], that applies predictive analytic algorithm Gaussian process on income tax data set to identify fraud in projected tax values. The paper is organized as follows: section 2 presents literature survey on various predictive analytic algorithms and various existing web services. Section 3 outlines the proposed framework. Conclusions and future work is given in section 4.

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### DIVERSITY OF MANGROVE FLORA IN MUDFLATS OF KRUTHIVENNU MANDAL, KRISHNA DISTRICT

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Mangrove Vegetation, mudflats, Important Value Index (IVI), Maturity Index Values (MIV), Similarity Index (SI), Coefficient Difference (CD).

### ABSTRACT

Mangroves are plant communities of the tropical and subtropical intertidal coastal zones which play an important and significant role in maintaining the coastal environment by reducing the impact of wave action and erosion in the coastal areas, preventing salinity and seawater ingress into the inland agricultural areas, and also providing protection to the coastline from the impact of cyclones. The present study was carried in mudflats mangrove patches, to find ecological status of the mangrove vegetation and to analyze significant changes). Results shows, *Avicennia marina* has highest Important Value Index (IVI) in Interu is 31.82, in Kruthevennu is 43.75 and in Nidamarru is 33.33. Maturity index values (MIV) of the field stations in the study area 67.00 of Interu, 61.00 of Kruthivennu and 71.00 of Nidamarru.Similarity indices (SI) is 100 and highest coefficient difference (CD) is 55.56. In the present study there is the densest mangrove vegetation at Nidamarru.

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### INTRODUCTION

Mangroves are opportunistic colonizers of intertidal along tropical and sub tropical coasts, these salt-tolerant trees that dominate the mudflats. Mudflats are described as very shallow, muddy areas along or near a shoreline that are exposed at low tide, at low tide the intertidal mud are exposed as a bare stretch of mud leaving water only in permanent channels while at high tide the mudflat is covered with water. Mudflats are recognized by Sutton, A, Sorenson, L & Keely, M. (2001) as one of the primary wetland ecosystems in the Caribbean. Mudflat ecosystems are very significantly influenced by biological, chemical and physical processes including predation and nutrient cycling and most of these processes are strictly influenced by the state of the tide (Hiscock, K. & Marshall, C. 2006).

Keshavarz, M, Kamrani, E, and Dabbagh (2013) undertook a study aimed at quantifying the higher macrobenthic infaunal taxa of mangrove mudflats at Khamir Por, Iran. Mangrove forests could play a crucial role in protecting coastal areas from sea level rise caused by climate change (Van Maanen *et. al.*, 2015). Apart from these ecological functions, mangroves play a very significant economic role in the lives of the coastal village communities. The villagers are dependent on mangroves mainly for fodder, fuel-woodand fishing activities. Elliot *et al.* (1998) notes that mudflats typically have low

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species diversity but support large numbers of particular kinds of animals especially invertebrates, many of which live buried in the [oxygen-poor] sediment and are specially adapted to life in these conditions. Other animals also exhibit special adaptations to living in mudflats and the ecosystem serves as an important food source for birds and fish. Curd (2009) noted that Intertidal areas such as mudflats dissipate wave energy, thus reducing the risk of eroding salt marshes, damaging coastal defenses and flooding low-lying land.

### Study Area

Krishna district in Andhra Pradesh consists of 126 Sq.km mangrove vegetation protecting the coastal line by the uniqueness of vegetation present in between the riverine and coastal ecosystems. Krishna deltaic region covered by moderate dense mangrove forests is 39 Sq.km while that covered by open mangrove forests is 87 Sq.km.

Machilipatnam is from  $16^{\circ}10$ 'N to  $16^{\circ}.17$ ' N latitudes and from  $81^{\circ}09$ ' E to  $81.13^{\circ}$ E longitudes on the southeast coast of India and in the eastern corner of Andhra Pradesh. Mangroves in this area are present between  $16^{\circ}0$ '- $16^{\circ}15$ 'N latitude and  $81^{\circ}10$ '- $81^{\circ}15$ ' E longitude. The northern distributary of Krishna river drains in this area near Hamsaladeevi.

Study areas are selected on the northward and eastward regions of agriculture drain systems to identify the mangrove diversity at which they join the sea. The study was carried out from June 2014 to May 2016. The study consists of the



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# DIVERSITY VARIATIONS OF MANGROVE FLORA AMONG CREEKS AND MUDFLATS OF MACHILIPATNAM MANDAL IN KRISHNA DISTRICT

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### **ABSTRACT**

Mangrove flora is unique vegetation that survives at high salinity; tidal regimes, strong wind velocity, high temperature and muddy anaerobic soil with the development of some adaptive morphological characteristics. The present study was carried in creeks and mudflats mangrove patches, to find ecological status of the mangrove vegetation and to analyze significant changes. Results shows, highest Important Value Index (IVI) in Kanuru 33.33and Achyyavaripalem is31.82 for Avicennia marina. Highest Maturity index values (MIV) is 71.00 of Kanuru and 31.82 of and 71.00 of Achyyavaripalem .Similarity indices (SI) is 80.00 highest, medium 76.92 to 72.72, least 66.64 to 50.00, majority of sites showed medium resemblance.50.00 is highest coefficient difference (CD) and least is 20.00.In the present study mudflats regions showed densest mangrove vegetation than creek region and most dominating species in both regions are Avicennia marina and Avicennia officinalis.

**KEYWORDS**: Mangrove Vegetation, creeks, mudflats, Important Value Index (IVI), Maturity Index Values (MIV), Similarity Index (SI), Coefficient Difference (CD).

### I. INTRODUCTION

Mangroves comprise salt tolerant plant species that occur along inter-tidal zones of rivers and seas in the form of narrow strips or as extensive patches in estuarine habitats and river deltas of tropical and sub-tropical regions. These plants have special adaptations such as stilt roots, viviparous germination, salt-excreting leaves, breathing roots, knee roots by which these plants survive in water-logged, anaerobic saline soils of coastal environments. Rahaman (1990), Swaminathan (1991) and Moorthy & Kathiresan (1996) observed that the mangrove plants have a great potential to adapt to the changes in climate, rise in sea levels and to solar ultraviolet—B radiation

Mangrove vegetation comprises approximately 59 species 41 genera, of which 34 species 29 genera are present in India. This includes 25 species along the east coast and 25 species on the west coast as cited by Banerjee et al., (1989); Singh (1990); Deshmukh (1994). East coast mangroves represent 51 species, 41 genera belonging to 29 families. [Venkateswarlu (1944), Mathauda (1957), Rao (1959), Sidhu (1963)]. Recent estimates by Mandal & Naskar (2008) reveal that 82 species of mangroves are distributed in 52 genera and 36 families in all the 12 habitats in India.

The Indian subcontinent anecdotal studies are studied by Chatarjee (1958), Sidhu (1963), Ahmed (1964), Chapman (1976), Lakshman (1984), Untawale (1984) and Dagar (1988), Rao and Rao (1992). All these scientists recognized that the mangrove ecosystems had been an important source of livelihood, subsistence economy and were the most exploitable for the traditional use of aquaculture and agriculture practices.

### II. STUDY AREA

The present study is carried out to identify the mangrove vegetation distributed in and around creeks and mudflats of Machilipatnam. Study areas are selected on the northward region of riverine systems to identify the mangrove diversity at which the river joins the sea and mudflat based sea coast, which is receiving tidal inundation. The study was carried out from June 2016 to June 2017. The first region (Region – I) consists of the creek based villages around Machilipatnam viz., Pallethummalapalem, Kona at which mangrove vegetation is



### Socio-Economic Aspects and Mangrove Resource Utilization by People in Creek based Villages of Krishna District

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### **ABSTRACT**

Mangroves are highly productive ecosystems with important economic and environmental functions. Based on vegetation status on five creek based villages the present study is to identify the species wise utilization and social-economic aspects among five villages i.e,Pallethummalapalem, Kona, Bhavanipuram, Kammavarichervu and Malakayalanka. The socio-economic situation and resource utilization among all five creek based field stations is studied with the help of questionnaire, the base line data consisting of community status, life style, occupation etc. are developed. From the data, the living conditions and dependency on mangrove forests are analyzed. The relationship between utilization of resources and socio-economic conditions in each field station are compared. It is observed that the mangrove forests are utilized for fire/fuel wood, thatching of houses, temporary walls, boat manufacturing, traditional furniture, medicinal, fodder, tannin, fish nets, fish poisoning extracts etc. by the inhabitants.

Keywords: Mangroves, Creeks, Socio-Economic, Resource Utilization

### I. INTRODUCTION

Mangroves comprise salt tolerant plant species that occur along inter-tidal zones of rivers and seas in the form of narrow strips or as extensive patches in estuarine habitats and river deltas of tropical and subtropical regions. Allen, (1987), Luther and Greenburg, (2009) identified that mangroves have been used by coastal inhabitants for centuries with the earliest reports.

Mangroves provide a suite of provisioning ecosystem services, including: (i) fisheries production, Nagelkerken et al., (2000), Dorenbosch et al., (2004, 2005) (ii) aquaculture production Minh et al., (2001) (iii) pharmaceutical generation Abeysinghe, (2010) (iv) production of timber and fuelwood (the latter being important in the Caribbean and Pacific Lugo, (2002), Walters, (2005), Walters et al., (2008).

Human uses of mangrove resources have been categorised into traditional, commercial and destructive uses Field, (1995). Uses of mangroves can be direct, involving the tangible benefits of mangrove forest products and mangrove-associated fisheries, or indirect, involving the intangible benefits of ecosystem services

Saenger et al., (1983), Ewel et al., (1998), Hogarth, (2007), Walters et al., (2008). The former would entail the direct use of products from the ecosystem and the latter would rely on the use of the mangrove ecosystem as a whole Bandaranayake, (1998).

### STUDY AREA

The present study is carried out to identify Mangroves vegetation utilization and socio-Economic aspects of people in creek based villages are given below.



Figure 1. Satellite map showing study areas

## Split and Non Split Edge Dominations in Fuzzy Graphs

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### Abstract

In this paper we discuss the concepts of connected edge domination, split edge domination and Non-split edge domination in fuzzy graph. An edge dominating set D of a fuzzy graph  $G = (\sigma, \mu)$  is a split edge dominating set if the induced fuzzy sub graph  $H = (\langle E-D \rangle, \sigma', \mu')$  is disconnected and a fuzzy graph  $G = (\sigma, \mu)$  is a non-split edge dominating set if the induced fuzzy sub graph  $H = (\langle E-D \rangle, \sigma', \mu')$  is connected. We discuss the properties of minimum fuzzy cardinality of a split edge dominating set  $\gamma_s$  (G) and minimum fuzzy cardinality of a non-split edge dominating set  $\gamma_{ns}(G)$  with other known parameter of G.

**Keywords:** Fuzzy graphs, fuzzy domination, fuzzy edge domination, fuzzy split edge domination number, fuzzy non split edge domination number.

### 1. INTRODUCTION

One of the notable mathematical inventions of the 20th century is that of Fuzzy sets by Lotfi. A. Zadeh in 1965. His aim was to develop a mathematical theory to deal with uncertainty and imprecision. The advantage of replacing the classical sets by Zadeh's fuzzy sets is that it gives more accuracy and precision in theory and more efficiency and system compatibility in applications [1]. The distinction between the set and fuzzy set is that the set divide the universal set into two subsets, namely members and non-members while fuzzy set assigns a sequence of membership values to elements of the universal set ranging from 0 to 1. Fuzzy graphs are useful to represent relationships which deal with uncertainty and it differs greatly from classical graph. The first definition of Fuzzy graph by Kaufman(1973) was based on Zadeh's fuzzy relations (1971). After that Rosenfeld (1975) who considered fuzzy relation on fuzzy sets and developed the theory of fuzzy graphs.

Several works on fuzzy graphs are also done by Akram, Samanta, Dudek, Davvaz, Sunitha [2,4,5,7,12]. It was during

1850's a study of dominating sets in graphs started purely as a problem in the game of chess. Chess enthusiasts in Europe considered the problem of determining the minimum number of queens that can be placed on a chess board so that all the squares are either attacked by a queen or occupied by a queen. The study of domination set in graphs was begun by Ore and Berge. A. Somasundram and S. Somasundram [7] discussed domination in Fuzzy graphs. The edge domination was introduced by Mitchell and Hedetniemi. V.R. Kulli and D.K. Patwari[4] discussed the total edge domination number of graph. They defined domination using effective edges in The concept of Perfect domination was fuzzy graph. introduced by CoCkayne et al. Perfect edge domination in graphs was studied in [3]. Perfect k-domination in graphs was studied in [4]. Edge domination in fuzzy graphs was defined in [7]. A work on Fuzzy Multiple domination was done in [8]. The concept of equitable domination [11] in graphs was introduced by Venkata Subramanian Swaminathan and Kuppusamy Markandan Dharmalingam.

### 2. PRELIMINARIES

It is known that graphs are simply models of relations. A graph is a convenient way of representing information involving relationship between objects. The objects are represented by vertices and relations, by edges. When there is vagueness in the description of the objects or in its relationships or in both, it is natural that we need to design a 'fuzzy graph model'. Here we summarize some basic definitions of dominations in fuzzy graph.

**Definition 2.1.** Let V be a finite non empty set and E be the collection of two element subsets of V. A fuzzy graph  $G = (\sigma, \mu)$  is a set with two functions  $\sigma : V \to [0, 1]$  and  $\mu : E \to [0, 1]$  such that  $\mu(x, y) \le \min \{ \sigma(x), \sigma(y) \}$  for all  $x, y \in V$ . The order p and size q of a fuzzy graph  $G = (\sigma, \mu)$  are defined to be  $p = \sum_{x \in \nu} \sigma(x)$  and  $q = \sum_{xy \in E} \mu(xy)$ .

**Definition 2.2:** Let  $G = (\sigma, \mu)$  be a fuzzy graph on V and S  $\subseteq$  V. Then the fuzzy cardinality of S is defined to be



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# **Analogous Study of Inverse Dominations in Fuzzy Graph and Its Applications**

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**ABSTRACT:** Let  $G(\sigma, \mu)$  be a fuzzy graph. Let D be a minimum fuzzy dominating set of G. If V-D contains dominating set say D' of G then D' is called an Inverse dominating set of G with respect to D. The inverse domination number  $\gamma_I(G)$  is the minimum cardinality of an inverse dominating set of G. The object of this paper is to generalize the Inverse dominations in fuzzy graphs. In this paper we discuss the concepts of inverse connected edge domination, inverse total edge domination, and inverse domination for instuitionistic fuzzy graphs, inverse split and non-split dominations. In this paper we extended our study to inverse regular connected domination number and derived some results related to the above inverse dominations in fuzzy graphs and prompt some applications on them like as computer communication network, social network theory.

AMS Subject Classification: 05C75

**KEYWORDS**: Fuzzy graph, Domination, Inverse connected edge domination, inverse split and non-split domination and inverse regular connected domination.

### I. INTRODUCTION

The concept of fuzzy sets and fuzzy relations was introduced by L.A. Zadeh in 1965 [1]. His aim was to develop a mathematical theory to deal with uncertainty and imprecision. The distinction between the set and fuzzy set is that the set divide the universal set into two subsets, namely members and non-members while fuzzy set assigns a sequence of membership values to elements of the universal set varies from 0 to 1. The first definition of fuzzy graph was proposed by Kaufmann [3]. Rosenfeld [4] introduced elaborated definition including fuzzy vertex and fuzzy edge. The concept of domination in graphs found its origin in 1850s with the interest of several chess players. Chess enthusiasts in Europe considered the problem of determining the minimum number of queens that can be placed on a chess board so that all the squares are either attacked by a queen or occupied by a queen. The domination number is introduced by cockayne and Hedetniemi. The study of domination set in graphs was begun by Ore and Berge [6]. V.R. Kulli wrote on theory of domination in graphs. A. Somasundram and S. Somasundram [7] discussed domination in |Fuzzy graphs. Among the numerous applications of the domination theory in graphs, the most often discussed is a communication network. This network consists of communication links between a fixed set of sites. The problem is to select a smallest set of sites at which the transmitters are placed so that every other site in the network is joined by a direct communication link to the site, which has a transmitter. In other words the problem is to find a minimum dominating set in the graph corresponding to this network.

The problem of selecting two disjoint sets of transmitting stations so that one set can provide service in the case of failure of some of the transmitting stations of the other set. This led them to define the inverse domination number. In this aspect, it is worthwhile to concentrate on dominating and inverse dominating sets. The Inverse domination in graphs was introduced by V.R. Kulli and Sigarkanti [9]. Many other inverse domination parameters in domination theory were studied, for example, in [7, 8, 10, 11,12]. In this paper we discuss the inverse connected edge domination

# NETWORK INTRUSION DETECTION MECHANISMS USING OUTLIER DETECTION

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### **Abstract:**

The recognition of intrusions has increased impressive enthusiasm for information mining with the acknowledgment that anomalies can be the key disclosure to be produced using extensive network databases. Intrusions emerge because of different reasons, for example, mechanical deficiencies, changes in framework conduct, fake conduct, human blunder and instrument mistake. Surely, for some applications the revelation of Intrusions prompts more intriguing and helpful outcomes than the disclosure of inliers. Discovery of anomalies can prompt recognizable proof of framework blames with the goal that executives can take preventive measures previously they heighten. A network database framework comprises of a sorted out posting of pages alongside programming to control the network information. This database framework has been intended to empower network operations, oversee accumulations of information, show scientific outcomes and to get to these information utilizing networks. It likewise empowers network clients to gather limitless measure of information on unbounded territories of utilization, break down it and return it into helpful data. Network databases are ordinarily used to help information control utilizing dynamic capacities on sites or for putting away area subordinate data. This database holds a surrogate for each network route. The formation of these surrogates is called ordering and each network database does this errand in an unexpected way. In this paper, a structure for compelling access control and Intrusion Detection using outliers has been proposed and used to give viable

Security to network databases. The design of this framework comprises of two noteworthy subsystems to be specific, Access Control Subsystem and Intrusion Detection Subsystem. In this paper preprocessing module is considered which clarifies the preparing of preprocessing the accessible information. And rain forest method is discussed which is used for intrusion detection.

Keywords: Outlier detection; Intrusion; security; network Intrusion;

### 1. INTRODUCTION

Intrusion discovery alludes to the issue of discovering designs in information that are altogether different from whatever remains of the information in view of proper measurements. Such an example regularly contains valuable data with respect to unusual conduct of the framework depicted by the information. These bizarre examples are typically called Intrusions, commotion, inconsistencies, exemptions, shortcomings, absconds, blunders, harm, shock, curiosity or eccentricities in various application spaces[5]. Intrusion location is a broadly explored issue and finds tremendous use in application spaces, for example, Visa extortion identification, deceitful utilization[9] of cell phones, unapproved access in PC systems, irregular running conditions in air ship motor revolution, anomalous



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### **TO WHOM IT MAY CONCERN**

This is to certify that Mr. Surya Pavan Kumar S/o Mr. M V Raghavulu, from the college Andhra Loyola Institute of Engineering & Technology has successfully completed 1 Months (8<sup>th</sup> June 2017 to 8<sup>th</sup> July 2017) internship with Hamstech India Pvt Ltd in HR Department. His Internship activity includes Recruitments, HR Operations & Payroll and there process of the company He had majorly involved in an activity of Recruitments & Operations. During the period of his internship program with us he had been exposed to different process was found punctual, hardworking and inquisitive.

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Me to Mohan Prasad

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25th July 2017,

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This is to certify that Ms. YALAMANCHILI HELA, MBA Student of Andhra Loyola Institute of Engineering & Technology, Vijayawada-520008 has undergone a Project Study on BRAND AWARENESS as a part of her curriculum in our organization from 29/05/2017 to 15/07/2017.

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