

## DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

## **INVITATION**

Management, Principal, Staff and Students of

VELAGAPUDI RAMAKRISHNA SIDDHARTHA ENGINEERING COLLEGE (Autonomous), VIJAYAWADA

Request your gracious presence at the One Day Seminar on

Data Analytics and Remote Sensing Applications at 10.00 AM on Monday 24th Feb, 2020

In the M. Tech Lab @ CSE Department

Resource Person

Dr. Jagalingam P

Sr. Assistant Professor, School of Computer Science and Engineering,

VIT Vellore

**Distinguished Guests** 

Sri N. Venkateswarlu

President, Siddhartha Academy of General and Technical Education.

Sri P. Lakshmana Rao

Secretary, Siddhartha Academy of General and Technical Education.

Sri M. Rajaiah

Vice-President, SAGTE & Convener of the College.

Dr. A. V. Ratna Prasad

Principal, V.R. Siddhartha Engineering College, Vijayawada

Dr. N. N. Sastry

Dean, R&D

Dr. B. Panduranga Rao

Dean, Student Affairs

have kindly consented to be the Distinguished Guests

Coordinator

Dr. S. Vasavi,

Professor, CSE Dept

<u>Convener</u> **Dr. D. Rajeswara Rao**Professor & Head, Dept of CSE

#### **DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING:: VRSEC**

Vijayawada, Dt: 25/02/2020.

To, The Principal, VR Siddhartha Engineering College, **VRSEC** 

Respected Sir,

Sub: Request to sanction an amount of Rs. 3000/- towards the honorarium for resource person Dr. Jagalingam P -Reg.

This is to bring to your kind notice that, with your prior permission we have arranged a seminar for M. Tech students on "Data Analytics and Remote Sensing Applications" by Dr. Jagalingam P, Sr. Asst. Prof, School of Computer Science and Engineering, VIT Vellore on 24-02-2020. In this regard, we request your kindself to sanction an amount of Rs. 3000/- as a honorarium for the resource person. Here with we are attaching the details of the seminar and permission letter for your kund perusal.

Thanking You,

Yours Faithfully,

Dr. D. Rajeswara Rao **Head:: CSE Dept** 

Enclosures: 1) Voucher

2) Permission letter

3) Registration sheets and Report

**PROFESSOR & HEAD** Dept of Computer Science Engineering V.R.Siddhartha Engineering College VIJAYAWADA-520 007

## Dr. Jagalingam Pushparaj

Assistant professor (senior)
School of computer science and engineering
Vellore Institute of Technology (VIT), Vellore, Tamilnadu.
India

Date of Birth: 15.09.1986

91-88-67824564 | 91-90-80012798 | lingam.jai10@gmail.com



## EDUCATION

Ph.D (Full	Title: Pan-sharpening the spatial resolution of multispectral imagery for the		2018
Time) - NITK	me) - NITK   assessment of near-shore bathymetry		
M.Tech	Remote Sensing (8.8, CGPA)	Anna University, Chennai	2012
	First Class with Distinction		
B.E	Computer Science and	Anna University, Chennai	2009
	Engineering (71%), First class		

### PROFESSIONAL EXPERIENCE

Period	Institution/ Organization served	Post held/Nature of Job
02.05.2019 to Till date	Vellore Institute of Technology, Vellore campus	Assistant Professor (Senior)
20.01.2018 to 04.04.2019	KL University, Vijayawada, Andhra Pradesh	Associate Professor
30.10.2017 to 08.01.2018	Basha Research Corporation (BRCORP), Hyderabad, Telangana	R&D Manager
15.06.2017 to 21.10.2017	KPR Institute of Engineering and Technology, Coimbatore, Tamilnadu	Assistant Professor (SL.G)
27.12. 2015 to 12.04.2017	National Institute of Technology Karnataka (NITK)	Senior Research Fellow
26.12. 2013 to 26.12.2015	National Institute of Technology Karnataka (NITK)	Junior Research Fellow
26.06.2012 to 14.11.2013	Christ the King Engineering College, Coimbatore, Tamilnadu	Assistant Professor

#### **PUBLICATIONS - CONFERENCES**

- Jagalingam P, Arkal Vittal Hegde "Building Extraction from Quickbird-2 Imagery", 7<sup>th</sup> International Engineering Symposium (IES 2017), 1-3 March 2017, C1-6-1 to C1-6-5, Kumamoto University, Japan.
- Jagalingam P, Arkal Vittal Hegde "Improving the spatial resolution of multispectral imagery,"
   10th International Symposium on Lowland Technology, September 15-17, 2016 at Mangalore,
   India, 342-346.
- Jagalingam P, Arkal Vittal Hegde "Pan-sharpening the spatial resolution of LISS IV imagery using Cartosat-1 Imagery," 6<sup>th</sup> International Engineering Symposium (IES 2016), 2-4 March 2016, C3-5-1 to C3-5-6, Kumamoto University, Japan.
- Jagalingam P, Arkal Vittal Hegde "Pixel level image image fusion A review on various techniques", In: Proceedings of Proceedings of the 3<sup>rd</sup> World Conference on Applied Sciences, Engineering and Technology, 27-29 September 2014, Kathmandu, Nepal, ISBN 13: 978-81-930222-0-7, 521-528.

#### CITATION & ID DETAILS

- Scopus Id 57193551482, h-index 03
- Google scholar Id <u>Lingam.jai10@gmail.com</u>, h-index 04, i10-index 02
- Researcher ID U-5947-2018
- Orchid ID 0000-0002-0748-1631

#### AREAS OF RESEARCH INTEREST

- Quality Metrics
- Image Processing
- Remote sensing application in Coastal
- Image fusion
- Wetland
- Bathymetry

#### PhD Guidance (On Going-4)

Name: Surya Kiran (FT)

Date of registration: 07-01-2019

Name: Mrs. Vanga Udaya Bhanu

Date of registration: 12-07-2018

Research area: Image Processing

• Name: Mr. Vajja Phaneendra

**GIS** software

: ArcGIS, Grass GIS.

**Survey Instruments** 

: GPS, Total Station, DGPS.

**Packages** 

: Matlab, Map source, Global mapper, MS office, Visual Basic.

### SUBJECTS HANDELED

- Operating system
- Remote sensing and GIS
- Software Engineering
- Environmental Science and Engineering
- Python Programming

# MASSIVA OPEN ONLINE COURSES (MOOCs)

- Advanced Operating Systems Udacity, Delivered by Georgia Institute of Technology
- Real Time Operating Systems NPTEL, Delivered by Prof. Rajib Mall, IITK

### LETTER OF APPRECIATION

- Actively contributed as a co-ordinator during "Comprehensive Academic Audit" (2015-2016), on 28<sup>th</sup> September, 2015, AMD-NITK.
- Actively contributed for ogranising the workshop on "Tsunami threat and its mitigation along indian coast", 2<sup>nd</sup> November, 2015, AMD-NITK
- Actively involved while organizing International Conference on Water Resources, Coastal and Ocean Engineering, 12-14 March, 2015, NITK.

# PEER REVIEWER (JOURNAL/CONFERENCE)

#### International Journals

- Journal of Computer Science, Science Publication, USA
- International Journal of Imaging Systems and Technology, Wiley
- International Journal of Image and Data fusion, T&F
- Applied Geomatics, Springer
- Journal of Electronic Imaging, SPIE
- Optical Engineering, SPIE
- Cogent engineering, T&F.

- 8<sup>th</sup> International conference on Asia and Pacific coast (APAC), 2015, 7-10, September, IIT Madras
- International conference on water resources, coastal and ocean engineering (ICWRCOE), 2015, 12-14, March, NITK.
- 5<sup>th</sup> Indian National Conference on Harbour and Ocean Engineering, 5-7 February 2014, CSIR-NIO, Goa.
- 3<sup>rd</sup> World conference on Applied sciences, Engineering and Technology (WCSET), 2014, 27-29, September, Nepal
- 2<sup>nd</sup> World conference on Applied sciences, Engineering and Technology (WCSET), 2013, 08-09, March, Hyderabad.

#### WORKSHOPS/SEMINARS ATTENDED

- Workshop on "Faculty skill enhancement", 13<sup>th</sup> to 15<sup>th</sup> February, 2018, KL University, Vijayawada, Andhra Pradesh, India.
- Workshop on "Induction program" 8<sup>th</sup> to 10<sup>th</sup> February, 2018, KL University, Vijayawada, Andhra Pradesh, India.
- Workshop on "Green construction techniques for climate resilient affordable housing", 03<sup>rd</sup> to 04<sup>th</sup> October, 2017, KPRIET, Coimbatore, India.
- Workshop on "Advancement & Challenges in water supply system", 11<sup>th</sup> to 12<sup>th</sup> August 2017, KPRIET, Coimbatore, India.
- . Workshop on "Microwave remote sensing", 17th to 18th October, 2016, AMD-NITK, India
- Workshop on "Coastal hydrodynamics and modelling", 7<sup>th</sup> October, 2016, AMD-NITK, India
- Workshop on Indo-Australian "Marine renewable energy", April 4-5, 2016, DOE-IIT Madras, India and Swinburne university of Technology, Australia.
- Workshop on "infocus", 9th January, 2016, AMD NITK
- Workshop on Tsunami Threat and its Mitigation along Indian Coast, 2 November, 2015, AMD NITK.
- Short Course on Mathematical Morphology and its Applications in Image Processing, July 14-24, 2015, ECE - NITK
- National Workshop on Linux and FOSS, 9-10 May, 2015, MACS NITK.
- Workshop on Recent trends in system in system application as applied to civil engineering, 9 Jan, 2015, AMD - NITK.
- Workshop on Climate Change and Coastal Processes, 4 February 2014, CSIR-NIO, Goa.
- Workshop on Netural Networks Approach for Speech Tasks, 28 Feb 1 March, NITK, 2014.

- Sahhyadri College of Engineering and Management, Mangalore
- Karavali Institute of Technology, Mangalore
- Srinivas Engineering College, Mangalore

#### **COUNTRY VISITED**

Japan

Nepal

#### **ACADEMIC ACTIVITES**

Contributed as a Co-ordinator in the Comprehensive Academic Audit (2015-16) on 28<sup>th</sup> September, 2015, NITK, Surathkal.

Contributed as a Co-ordinator in the National Board of Accreditation, visited during 23-24 September, 2016.

Date:

Place: Vellore

Jagalingam P

Signature

#### References:

Prof. Katta Venkataramana Dean Academic National Institute of technology Karnataka ven.nitk@gmail.com

Prof. S.A. Sannasiraj
Head of the department
Department of Ocean Engineering
Indian Institute of Technology Madras
sasraj@iitm.ac.in

Prof. G.S Dwarakish Applied mechanics and hydraulics National Institute of technology Karnataka dwaraki.gs@gmail.com

Prof. Arkal Vittal Hegde
Applied mechanics and hydraulics
National Institute of technology Karnataka
arkalvittal@gmail.com



# VELAGAPUDI RAMAKRISHNA SIDDHARTHA ENGINEERING COLLEGE DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

# One Day Seminar on "Data Analytics and Remote Sensing Applications"

24<sup>th</sup> February, 2020

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2.	Ch. Triveni	198W1D5805	Cheukuittiveni@gmil.com		Tirken ch
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One Day Seminar on "Data Analytics and Remote Sensing Applications"

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14.	V. Rohini	198WID5819	Valaparlarohiri 1978@	8464947095	Robin
15.	M. Yamini	198WID5813	yanini. reddy 2001@gmil	9160065935	yamini.M
16.	P. MA-4125 H BABU	198W1D6808	CSCMaheshbabu 521 Quil	9705609510	Malaphaley
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24<sup>th</sup> February, 2020

# DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING :: VRSEC Seminar on "Data Analytics and Remote Sensing Applications" Report

24-02-2020

#### Naïve Bayes Classification:

Naive Bayes classifiers are a collection of classification algorithms based on **Bayes' Theorem**. It is not a single algorithm but a family of algorithms where all of them share a common principle, i.e. every pair of features being classified is independent of each other.

Naïve Bayes classifiers are highly scalable, requiring a number of parameters linear in the number of variables (features/predictors) in a learning problem. Maximum-likelihood training can be done by evaluating a closed-form expression, which takes linear time, rather than by expensive iterative approximation as used for many other types of classifiers.

#### **Applications of Natural Language Processing**

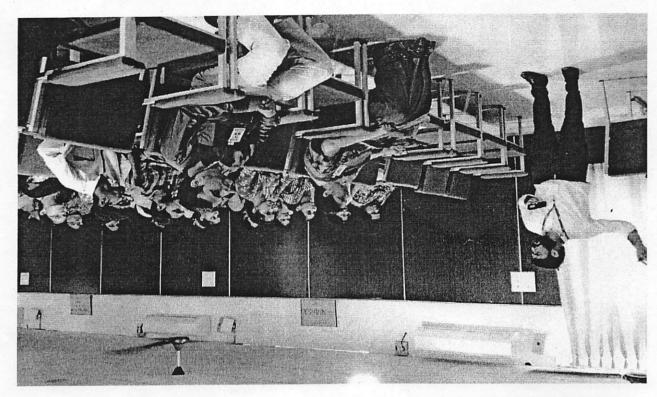
- Text Classification and Categorization
- Named Entity Recognition (NER)
- Part-of-Speech Tagging
- Semantic Parsing and Question Answering
- Paraphrase Detection
- Language Generation and Multi-document Summarization
- Machine Translation
- Speech Recognition
- Character Recognition
- Spell Checking

#### **Remote Sensing**

Remote sensing is the science and technology by which the properties of specified objects. area, or phenomenon can be identified, measured, and analyzed without direct contact with them in order to make useful decisions. The applications of remote sensing include land-use mapping, weather forecasting, environmental study, natural hazards study, and resource exploration.

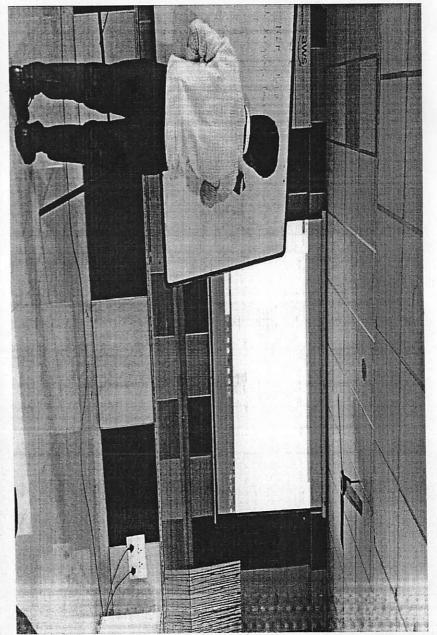
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#### DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING:: VRSEC

#### Objectives of the Seminar:

- Business Analytics and its application in various domains
- Decision making using Business Analytics
- Time Series data analytics & its strategic implications
- Time Series analytics using predefined statistical mode
- To understand the principles, applications, trends, and pertinent issues of geographical information systems and sciences, including remote sensing (RS), Photogrammetry, cartography, and global positioning systems (GPS).
- To provide learning and teaching experiences with real world problems.
- To develop applications of environmental remote sensing and GIS which can directly enhance service delivery on land use management, ground water management/prospects, agriculture, forestry, food and water security, disaster management, etc.

#### Outcome

• As it is the seminar for M.Tech first years, students got benefited and they are implementing all the above said applications in their Major projects. They gained knowledge about GIS & Remote Sensing techniques. They improved the skill for solving the engineering problems related to GIS & Remote Sensing.