Jees Augustine

. ALGORITHM . DATABASE . DATA SCIENCE . DEEP LEARNING . GRAPHS . MACHINE LEARNING . 815 Bering Drive, Apt # 1414 - C, Arlington

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EDUCATION

Ph.D. Computer Science and Engineering

University of Texas at Arlington, USA

(CGPA: 4.0/4.0)

Master in Engineering . Computer Science and Engineering

Birla Institute of Technology & Science, Pilani, India

(CGPA: 8.19/10.0)

Arlington, Texas 2014 -Present

Pilani, India Fall 2011- Fall 2013

PROFESSIONAL EXPERIENCE

Cisco Systems - India

Bangalore, India SOFTWARE ENGIEER II Aug-2013 - Aug-2014

• Implementation and refinement of features in Multi-Protocol Label Switching (MPLS) and Fast Rerouting (FRR) on

mobile backhaul networks.

EMC Corporation Bangalore, India PROIECT INTERN Jan-2013 – Jun-2013

• Design and development of an application, choreographing the Backup Server Install/Upgrades in Python.

• Devising a **pseudorandom number generator** for verifying the client-side deduplication.

Indian Institute of Technology - Chennai

PROJECT INTERN

Chennai, India

May-2012 - Jul-2012

• Online Minimum Makespan Scheduling with improved Buffer Size.

Vikram Sarabhai Space Center (VSSC)

PROJECT INTERN

Trivandrum, Kerala

Nov-2009 - Jan-2009

• Design of information warehousing system for launch vehicle simulations using JSP and MySQL.

SKILLS

Data Analysis Pandas, NumPy, SciPy

Machine Learning SciKit-Learn

Deep Learning Keras, TensorFlow

Visualization Matplotlib, Tableau(beginner)

Languages Python, C, Java, HTML, JSP

Databases MS Access, MS SQL Server, MySQL, Oracle

Web Technologies HTML, XML, CSS, JavaScript

Query Languages SQL, PLSQL

PUBLICATIONS

- Abolfazl Asudeh, Azade Nazi, Jees Augustine, Saravanan Thirumuruganathan, Nan Zhang, Gautam Das, Divesh Srivastava. "Leveraging Similarity Joins for Signal Reconstruction". Accepted VLDB: Very Large Databases 2018.
- [Poster] Abolfazl Asudeh, Azade Nazi, Saravanan Thirumuruganathan, Jees Augustine, Sona Hasani, Nan Zhang, Gautam Das, Divesh Srivastava. "Finding the Closest Point to a Prior in Large-Scale Sparse Binary Under-Determined Systems", In iPerform 2017.
- [Poster] Azade Nazi, Jees Augustine, Saravanan Thirumuruganathan, Gautam Das, Divesh Srivastava, Nan Zhang. "Finding Top-k Source-Destination Flows in a Network". In iPerform 2016.

WORKING PROJECTS

- AEL: Deep Learning Models to Predict User's Spatial Locations Using GPS Data
- Computing Top-K Nearest Neighbor Graph through Crowdsourcing

RELVANT COURSES

Advanced Computational Models and Algorithms . Special Topics in Advanced Information Security . Machine Learning . Advanced Algorithms and Complexity. Advanced Computer Networks. Advanced Operating Systems. Algorithm Analysis and Design. Security in Computing . Data Analysis and Modeling .

CERTFIED COURSES ONLINE - MOOC Coursera Introduction to Data Science in Python -Link-Coursera Programming for Everybody, Getting Started with Python -Link-Coursera Python Data Structures -Link-Coursera Using Python to Access the Web Data -Link-Coursera Using Databases with Python -Link-ONGOING COURSES ONLINE - MOOC Coursera Deeplearning.Ai Coursera Machine Learning Coursera Neural Networks for Machine Learning Udacity Deep Learning from Google edx Machine Learning for Data Science RESEARCH EXPERIENCE AT&T Research Grant, DBXLab University of Texas at Arlington Spring 2017 Quatar Research Foundation Grant, DBXLab University of Texas at Arlington Spring 2018 PROJECTS 1. Face Recognition using Support Vector Machines (SVM) UTA, Sep 2014 - Dec 2014 Technology Python2.7, NumPy, SciPy Dataset AT&T Image Dataset (40 different individuals) Methodology Principal Component Analysis for dimentality reduction, SVM for classification Accuracy 88% in Testing 2. Image Recognition using Linear Discriminant Analysis (LDA) UTA, Sep 2014 - Dec 2014 Technology Python2.7, NumPy, SciPy Dataset AT&T Image Dataset (40 different individuals) Methodology Principal Component Analysis for dimentality reduction, LDA for classification **Accuracy** 94% in Testing 3. Choreography of Backup Server Install/Upgrade EMC-Corporation, Bangalore: Jan 2013 - Jun 2013 **Technology** Python2.7, Linux, EMC Avamar, MySQL Dataset Proprietary, EMC corporation Methodology Choreograph the Software Upgrade, Generate Pseudo Number from Linux to test, Validation and Sanity Check **Deployment** for Internal Use at EM Corporation Live Migration of Virtual Machine over a Network BITS, Pilani, Aug 2012 – Dec 2012 Technology Java, Linux, MySQL, KVM Dataset Synthetic Dataset Generated Methodology Premature Negotiation, Push-Pull Negotiation with source and destination **Deployment** Experiential Middleware framework on the cloud enabling Semantic Dynamic Composition BITS, Pilani, Jan 2012 – Dec 2012 Technology Java, Linux, MySQL Dataset Synthetic Dataset Generated Methodology Sematic module identification with Natural Language, compose brand-new cloud services based on requirement Deployment Experiential Distributed System Simulator BITS, Pilani, Sep 2011 - Dec 2011 Technology Java, Linux Dataset Synthetic Dataset Generated Methodology Deadlock Detection, Deadlock Prevention, Process Synchronization, IPC **Deployment** Experiential 7. Design of Information Repository System for Launch Vehicle VSSC, ISRO, India Dec 2010 - Jan 2011 Technology JSP, MySQL, Apache Server Dataset Proprietary flight data ISRO Methodology Deadlock Detection, Deadlock Prevention, Process Synchronization, IPC **Deployment** for Internal Use at VSSC, ISRO TEACHING and MENTORSHIP

Fall 2017

• Graduate Teaching Assistant, Advanced Topics in Database Systems, UTA.

Graduate Teaching Assistant, Computer Networks, UTA.

Fall 2016, Spring 2016

Graduate Teaching Assistant, Computer Networks I: Protocols and Architecture, UTA.

Fall 2014 - spring 2015

• Teaching Assistant, Data Structure and Algorithms, Birla Institute of Technology and Science, India.

Fall 2012

Summer 2016

• Teaching Assistant, Computer Networks, Birla Institute of Technology and Science, India.

Fall 2011 - Spring 2012

ACADEMIC ACHIEVEMENTS

- 1 among the 18 qualified for BITSAT- Higher Degree Program (Computer Science), an All India entrance examination for admission into Master Degree by Birla Institute of Technology and Science, Pilani (BITS-Pilani), India.
- Secured 98.88 Percentile in Graduate Aptitude Test in Engineering (GATE) in 2011 (Written by .13M Students).
- Project Forum Member (Masters) Computer Science Association BITS Pilani.
- Secured 1st position for presenting the paper "Self-Defending Networks-A Smarter Way to Defend" at XTRIUM 09 v.20, Technical Festival by Association of Electronics and Communication Engineering, MACE, Kothamangalam.
- Secured 2nd position for presenting the paper "Self-Defending Networks with Automatic Intrusion Detection" at Qbit'09 v.20, Technical Festival organized by Department of Computer Science and Engineering, MACE, Kothamangalam.