

SILAMBARASAN MADANAKUMAR

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EDUCATION

Illinois Institute of Technology

Masters in Computer Science with Data Analytics Specialization (GPA: 4/4)

Chicago, USA

December 2016 (Expected)

Amrita School of Engineering

Bachelor of Technology in Electronics and Communication Engineering (GPA: 7.3/10)

Coimbatore, India

May 2009

TECHNICAL SKILLS

Programming Languages: Python, Java, R, PL/SQL, LaTeX, C and C++.
Applications: Eclipse, MATLAB, Eagle PACE, Eagle STAR, Control-M and, Autosys.
Version Control: Git and SVN.
Database: Oracle 9i and 11g.
Platform: Windows, Linux, UNIX and Amazon Web Services EC2.
Web Development: HTML, CSS and JavaScript.
Languages: English, Tamil and Spanish.
Relevant Academic Courses: Machine Learning, Natural Language Processing, Data Mining

WORK EXPERIENCE

Graduate Teaching Assistant - Illinois Institute of Technology, Chicago

September 2016 - Present

- Teaching Assistant for Dr. Yonshik Choi's Computer Networks - Fundamentals I course in Fall 2016 semester.

Chair Webmasters - TEDxIIT, Chicago

January 2016 - Present

- Led Webmasters team (www.TEDxIIT.com) and coordinated with diverse team and ensured quick turnaround on tight deadlines.

Research Assistant- Illinois Institute of Technology, Chicago

January 2016 - Present

- Developing Python scripts for parsing C headers file to auto-generate C code for model simulation used in Smart Grid Systems for Dr. Alexander Flueck.

Software Engineer - Hexaware Technologies, Chennai, India

May 2012 - July 2015

- Developed and enhanced Bash scripts, Oracle database objects and Autosys jobs.
- Trained and mentored team of 6 in system related technologies and processes as the Technical Lead.
- Experienced in day-to-day data analysis of gigabytes of transactions data to ensure the data quality and handle exceptions.

Systems Engineer - Tata Consultancy Services, Bangalore, India

February 2010- May 2012

- Improved the data loading performance by 30% by replacing existing data feed design with new efficient design, preventing risk of SLA breaches.
- Automated monthly data feeds saving 8 workhours/month spent on the manual process to load the analytics data.

ACADEMIC PROJECTS

- Mining Brand Perceptions from Twitter Social Networks (under mentorship of Dr. Aron Culotta).
- Implementation of Animoto Clone- Client and Remote Workers on AWS EC2 Instance using DynamoDB and S3.
- Performance Evaluation of Terasort using Native Java, Apache Hadoop and Spark on AWS EC2 c3.large instance.
- Predicting Future Movie Ratings based on Social Media Buzz by performing Sentiment Analysis.
- Automatic Text Summarization using Lexical Chains for Natural Language Understanding.
- Link-State Routing algorithm implemented using Dijkstra's algorithm in JavaFX.
- Determining Driver Fatigue Using Real-Time Non-Intrusive Monitoring implemented using SVM classifier.

PUBLICATIONS

- Improved Eye Location Algorithm for Driver Fatigue Monitoring.* April 2009
National Conference on Recent trends on Communications & Signal Processing
- Determining Driver Fatigue using Real-time Non-intrusive Monitoring (Best Paper in Signal Processing)* February 2009
International Conference on Optoelectronics, Information and Communication Technologies