ROHITH YERAVOTHULA

1210 W Adams Los Angeles CA 90007
https://www.linkedin.com/in/rohith-yeravothula/   yeravoth@usc.edu (323) 620-7351

EDUCATION

- **University of Southern California**   **Los Angeles, CA**
  Master of Science in Computer Science, GPA **4.0/4.0**   May 2019
- **Indian Institute of Technology**   **Jodhpur, India**
  Bachelor of Technology in Computer Science and Engineering, CGPA **8.77/10**   May 2015

SKILLS

- **Languages**: Python, Scala, Java, C, C++, Shell scripting
- **Software**: Apache Spark, Kafka, Flink, Docker, Git
- **Cloud Platforms:** AWS Unix/Linux, Azure, GCP
- **Web Technologies**: JavaScript, AngularJS2, D3js, HTML
- **Databases**: PostgreSQL, Cassandra, MongoDB, Redis
- **Frameworks**: Flask, Play-Scala, Scala-Spray, Akka-Actors

EXPERIENCE

Research Student, Information Sciences Institute USC   **Los Angeles**
Causal Knowledge Organization   August 2017 - present
- Built a web interface to produce text ontological mappings, annotations and relationships using **Python** and **Spacy**
- Led the drive to integrate DetectorMorse, a sentence boundary detection tool, which boosted accuracy to **99.55%**

Senior Software Development Engineer, Sigmoid   **Bangalore, India**
Domain Specific Knowledge Graph   May 2015 – June 2017
- Developed an Information Extraction system to convert text into knowledge graph on **Spark, Scala** and **Cassandra**
- Remodeled graph construction algorithm to avoid super nodes which reduced average query time by **20%**
- Created knowledge graph **CRUD REST API**, Web interface to train, test and integrate with external applications

Time Series Real-Time Predictive Maintenance System
- Implemented an unsupervised machine learning algorithm for time series data on **Spark**, **HDFS**, and **MongoDB**
- Engineered a real-time prediction model on **Spark Streaming** and **Kafka**, that scaled the performance by **100X**
- Collaborated with a team of **3**, developed a web interface to monitor and train the system using **Python**, **AngularJS2**

Summer Intern, University of British Columbia   **Vancouver, Canada**
Cyber Security for Power Grids   May 2014 – June 2014
- Designed a mathematical model to represent UBC's power grid as SCADA architecture on I2Sim software
- Improved model's prediction accuracy to **80%** in real-time scenarios by incorporating attack graph concept

Summer Intern, Defense Research and Development Organization   **Hyderabad, India**
C Compiler Test Suit   May 2013 – June 2013
- Designed and Implemented a C compiler test suit using differential algorithm, CSmith, **Python** and Shell Scripting

PROJECTS

Sentimental Analysis on Twitter stream   May 2017 – June 2017
- Created a real-time distributed sentimental analysis pipeline on **Spark Streaming** and **Stanford NLP** for Twitter data
ETL Pipeline   Jan 2017 – May 2017
- Devised an ETL pipeline architecture on Spark and HDFS to handle **150** TB data with 2 sec/query response time
- Analyzed and Implemented divide and join technique which reduced the Joins time and shuffle space by **400**%
Autonomous Asset Management System   Sep 2016 – Jan 2017
- Coordinated and led a team of **3** to implement a real-time infrastructure management system to monitor **3M** assets
- Eliminated manual monitoring of assets by introducing rule-based mining engine to identify anomalies
Apache Log Analyzer (Hackathon)   July 2016 – Aug 2016
- Engineered a real-time apache log analyzer pipeline to provide statistical insights from log messages
- Collaborated with a team of **4** to implement the pipeline on Kafka, Spark Streaming, Elastic search and Kibana

EXTRACURRICULAR ACTIVITIES

- Member and frequent speaker at Sigmoid meet up group consisting more than **5K** developers, Bangalore
- Mentored **4** interns to implement a web scraping tool for e-commerce websites on Apache Spark and MongoDB
- Elected as students' senator and member of students' general body committee at IIT Jodhpur