Channabasava Gola
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EDUCATION

Arizona State University, AZ Aug'17 - May'19 (expected)
Master's in computer science **GPA: 3.50**
Coursework: Distributed Database Systems, Machine Learning, Cloud Computing, Data Visualization, Foundations of Statistical Learning, Knowledge Representation, Multimedia and Web Databases, Semantic Web Mining.

Visvesvaraya Technological University, Karnataka, India Aug'10 - Jun'14
Bachelor of Engineering in Computer Science **GPA: 3.40**
Relevant Coursework: Data structures and algorithms, Operating system, Computer networks, OOPS.

TECHNICAL SKILLS

Programming: Python, SQL, C++, shell scripting, R, JavaScript, Java, graphDB (neo4j).
Software/Technology: Selenium (scraping), web services, git, Jupyter Notebook, arcGIS, elasticHQ, Kibana, PEP8, excel.

WORK EXPERIENCE

ASU Decision Theater Network, Student Data Scientist (GRA) Feb'18 - Present
Project: Helios (Dashboard visualizing schools and census relationship) Aug'18 - Jan'19

- Normalized, developed ER diagram on census tract and school's dataset and modeled data. Did analysis on variables that helped discover interesting correlations. **[Pandas, ETL, Lucid charts]**
- Developed REST end points. Wrote test cases. Containerized whole application with docker. Improved performance by using redis (containerized) caching. **[REST, Flask, SQLAlchemy, PyTest, Docker]**

Project: Pulse (Real time sentiment analysis of streaming data) Jan'19 - present

- Planned system design and data pipeline for a project with streaming data along with Tech Lead. **[Spark, Kafka, OpenFaas]**
- Currently developing Parallel processing modules that run pre-trained machine learning algorithms in Spark clusters.

Other Projects Feb'18 - Present

- Set up Elasticsearch cluster. Loaded dataset with 5M data points. Constructed queries including filtering, aggregation and worked with epoch timestamps. **[Elasticsearch, Logstash, SQL]**
- Developed Geo-Data analysis pipeline for pre-processing. **[ArcPy, GeoPandas, Celery]**
- Work on cross functional teams, assist with ad hoc data investigations and analysis. **[AWS, Google Cloud Platform]**

BigBasket.com, Software Engineer - II Apr'17 - Jul'17

- Developed python modules to collect data periodically for analysis by investors.
- Troubleshoot issues on Payment and wholesale catalog page. **[JavaScript, SQL, Django]**

Aricent, Software Engineer Oct'14 - Mar'17
Project: Automated Debugger Natural Language Processing Nov'16 - Jan'17

- Developed **tri-gram and bi-gram Probabilistic Language Models** to classify commands from natural language. Achieved a **precision** of 95 and **recall** of 91.
- Developed a web scrapper to collect commands from the web to train the model and did text processing. **[NLTK]**

Project: Snapshot Tool [ASR 9K] Aug'16 - Oct'16

- Developed a script that SSH connects to given IP of a switch. Runs commands to note down configurations made.
- Considering configurations, script analyzed the kind and amount of traffic(packets) and mail it to developer/tester and manager if the device is underused. Tool would take in mail IDs, IP address and threshold and perform the task for all IP addresses. **[regEx]**

ACADEMIC PROJECTS

Object Detection in Video as a Service (git repo) Feb'19 - Mar'19

- Developed web application that returned objects from video using deep learning model. Implemented **autoscaling** considering number of requests. **[AWS, SQS, boto3]**

Analyzing and Visualizing 11 years Australian Open dataset Jan'18 - Feb'18

- Made an informative yet beautiful poster and an interactive DV using d3.js. **[Tableau, d3js]**

Tag recommender for stack overflow posts Jan'18 - Feb'18

- Recommended tags for posts using term-tag affinity, random forest models and TF-IDF. **[stemming, stopwords, sklearn]**

Text mining, Multimedia Web Databases Aug'17 - Dec'17

- Implemented **TF**, **TF-IDF** with different objects and features as tags to figure out how discriminating tags are in describing objects.
- Developed **movie recommendation** module using Latent Factor Analysis. Have used MovieLens dataset. Used dimensionality reduction to calculate implicit ratings and recommend movies on these ratings. **[sklearn]**

OTHER PROJECTS

Rainfall prediction (Research paper) Nov'16 - Feb'17

- Developed **Polynomial regression model** to predict rainfall and cross-validated it using **k-fold**. Used dataset from Indiaportal.org for Bangalore. Selected features using **data visualization** techniques and based on variance. Trained the model to predict rainfall based on cloud coverage, humidity, and precipitation. **[Scikit, matplotlib]**
- Implemented **linear and logistic regression, K-means** on Coursera. **[Octave]**