BHARGAVA UKKALAM

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EDUCATION

Stony Brook University, Stony Brook, NY **Dec 2018(Expected)**

- Master's Degree in Computer Engineering **GPA-3.52**
  Relevant coursework - Analysis of Algorithms, Data Structures and Algorithms in Java, Mobile Sensing Systems and Applications, Mobile Cloud Computing, Computer Networks, Pattern Recognition
  Teaching Assistant – Computer Techniques for Electronic design. **(C++, Data Structures and Algorithms)**

PES Institute of Technology, Bengaluru, India **Sep 2011-May 2015**

- Bachelor's Degree in Electronics and Communication

SKILLS

Programming languages/Databases: Java, Python, C++, JavaScript, SQL, MongoDB
Frameworks/IDE/Editors: Flask, Node.js, Eclipse, Visual Studio, Android Studio, Spyder, Jupyter, MS SQL Server
Operating systems/Version control system: Microsoft Windows, Mac OS, Linux, GIT

EXPERIENCE

IPC Systems, Inc : *(Python, Pandas, NumPy, Matplotlib, Jupyter, SQL, Flask, Node.js, REST API, Agile)* **New Jersey, US**
Software Developer Intern|Research and Development team **Jun 2018-Aug 2018**

- Performed data visualization and data analytics on revenue generated by IPC's product-Unigy360.
- Designed and developed Python scripts to fetch and analyse the relevant data from CSV, excel files and export data to SQL and perform data visualization using Python librairies(NumPy, Pandas, Matplotlib) and Jupyter.
- Designed database tables, stored procedures to store and process the data from the Python scripts.
- Developed a Python application to automate the process of dialing into outlook conference calls from Unigy360 application.
- Developed REST API's using Flask and Node.js with CRUD functionality and integrate it with front end application.

ERICSSON: *(SQL, Python, Pandas, JavaScript, HTML, CSS*) **Bengaluru, India**
Network Engineer **Oct 2015-Apr 2017**

- Performed data analytics on large sets of detailed RAN (3G/4G LTE) excel data using Python and SQL.
- Developed Python scripts to extract site data from bulk excel network data and analyse the patterns of errors in site.
- Designed database tables in SQL to segregate and store relevant 3G/4G LTE sites and network data.
- Developed a web application using HTML, CSS and JavaScript for monitoring carriers, logging errors and downsites.
- Optimized in-application SQL statements and queries used for front end application.

PROJECTS – Github handle

ChatBot: *(Python, TensorFlow, Anaconda, Seq2Seq Architecture with Beam search*) **Jul 2018-Aug 2018**

- Developed a customized chatbot using Deep Natural Language Processing model on Cornell movie dialogue dataset.
- Implemented Seq2Seq architecture and training algorithm with beam search encoding technique.

Amazon clone- Shopping website: *(Node.js, MongoDB, Elasticsearch, EJS, mlab)* **Sep 2017-Dec 2017**

- Designed and developed a ecommerce web application with backend Node.js server and passport.js for authentication.
- Used MongoDB to store application data and host the data on mlab cloud database service.

Bitcoin Cryptocurrency market – Data Analysis: *(Python, Jupyter)* **Jan 2018-Mar 2018**

- Aggregated and consolidated data from the coinmarketAPI using Python to study the general trend of Cryptocurrency market.
- Compared the Top 10 Cryptocurrency market capitilization and analysed daily, weekly market fluctuation and winners and losers.

Decision Tree Classifier: *(Python, TensorFlow)* **Feb 2018-Apr 2018**

- Implemented Decision Tree Induction algorithm for classificarion of large datasets in UCI machine learning repository.
- Used open source software for SVM and Deep-learning(TensorFlow) based classification to compare the performance.

Data Cube Formation: *(Java, Data Structures and Algorithms)* **Feb 2018-Mar 2018**

- Designed and implemented Star-cubing algorithm that performs aggregations on multiple dimensions and computes data cubes.
- Tested the algorithm on a dataset consisting of 25000 inputs in UCI machine learning repository efficiently in 3.66 seconds.
- Gained expertise on concepts like Recursion and Memoization through real time application design.

Frequent Pattern Mining: *(Java, Data Structures and Algorithms)* **Mar 2018-Apr 2018**

- Generated frequent item sets from datasets in UCI machine learning repository.
- FP Tree and Conditional FP Trees were created to extract frequent item sets after two passes over datasets.
- Tested the algorithm on a dataset consisting of 40000 inputs in UCI machine learning repository efficiently in 6.37 seconds.