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EDUCATION

Stony Brook, NY — **Stony Brook University** — **Aug 2017-Dec 2018**

- Master's Degree in Computer Engineering — **GPA-3.47**
  Relevant coursework : Analysis of Algorithms(Dr Rezaul Chowdary), Data Structures and Algorithms in Java, Mobile Sensing Systems and Applications, Mobile Cloud Computing, Computer Networks, Pattern Recognition and Data Mining

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

- Bachelor's Degree in Electronics and Communication

TECHNICAL SKILLS

Programming/Scripting languages/Databases: Java, Python(Pandas, NumPy, MatplotLib), C++, JavaScript, SQL, MongoDB, HTML, CSS
Frameworks/Cloud Platforms:Flask, AngularJS, Node.js, Jupyter, Heroku, MS SQL Server, AWS ,Google Firebase, mLab
Operating systems/Version control systems/Editors: Microsoft Windows, Mac OS, Linux, GIT,Eclipse, Visual Studio, Android Studio

WORK EXPERIENCE

Software Developer Intern(R&D) — **IPC Systems, New Jersey** — **Jun 2018-Aug 2018**

Key Skills : *Python, Pandas, NumPy, Matplotlib, Jupyter, SQL, Flask, Node.js, AngularJS, REST API, Agile*

- Developed Python applications to analyse and visualise data 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 libraries(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.

Teaching Assistant — **Stony Brook University** — **Aug 2017-Dec 2017**

- **Course** - Computer Techniques for Electronic design. **(Data Structures and Algorithms, OOPs concepts)**
- **Responsibilities -** Helped designed the course ,proposed materials and graded projects and assignments.

Network Engineer(RAN-Data Analyst) — **ERICSSON, India** — **Oct 2015-Apr 2017**

Key Skills : *SQL, Python, Pandas, JavaScript, HTML, CSS, Agile*

- **Leadership** - Lead a team of 12 engineers to perform data analytics on large sets of detailed RAN (3G/4G LTE) excel data using Python and SQL and analyse error patterns.
- **Technical** - Developed Python scripts to extract data from bulk excel network data which reduced man hours by 2 hours.
- 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.
- Mentored and trained new Graduate Engineer Trainees to successfully perform challenging tasks.

PROJECTS – github.com/bhargavaukkalam

Unix File System with B-Trees: *(Java, Data Structures and Algorithms)* — **May 2018-Jul 2018**

- Designed and developed an Unix file system that allows several file/directory operations and stores metadata.
- Implemented B-Trees to store specified number of files and enable efficient insertion, deletion, quick access to files/directories.
- Got acquainted with file system concepts, data structures and implemented Object Oriented Programming concepts.

Web Crawler – Word Density Analysis: *(Java, JSoup, Data Structures and Algorithms)* — **Jul 2018-Aug 2018**

- Designed and built a web crawler to filter and list out most important topics and contents of a webpage based on word density.
- Parsed web pages, performed URL validation for web pages and designed a classifier to output most important words.
- Performed data cleaning, discarding stop words for accuracy, assigning weights for words and get most important words.

ChatBot: *(Dialogflow, Node.js, SQL, Heroku*) — **Feb 2018-May 2018**

- Developed a customized chatbot that can answer frequently asked questions(FAQ's) and integrated it to Facebook messenger.
- Used Dialogflow to process Natural language , train data and Node.js for integrating the bot with gmail and SQL for storing data.

Decision Tree Algorithm Classifier and Frequent Pattern Mining: *(Python, Data Structures and Algorithms)* — **Jan 2018-May 2018**

- Built Classifier to classify datasets in UCI Machine learning repository. Constructed Decision Trees for the same.
- Created FP trees and conditional FP trees and generated frequent item sets after two passes over the datasets.
- Tested the algorithm on dataset consisting of 40000 inputs from UCI Machine learning repository efficiently in 6.37 seconds.

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

- Designed and developed an e-commerce 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.