AMAL KRISHNA R

EDUCATION

M.S. in Computer Science:

Sept, 2017 - Dec, 2018 (expected)

Concentration: Data Analytics

CGPA: 3.5/4
Boston University

B.Tech in Avionics Engineering:

2012 - 2016

Indian Institute of Space Science and Technology (IIST)

Relevant Experience

Quality Assurance Intern, Boston University

Sept, 2017 - May, 2018 & Sept, 2018 - present

- QA Intern on QA process for HR & Payroll functions & Programming team at the BU IT & Services (BUworks).
- SAP Automation & HPE LoadRunner for performance testing.
- Writes unit and integration test cases for SAPUI5 web-app testing.

Data Analytics Intern, MetLife

June, 2018 - Aug, 2018

- Data visualization of Net Promoter Score survey data and reformated NPS analytics to create an ongoing data set, using Alteryx workflow.
- Prepared an ordinal logistic model to provide descriptive significance of different factors that impact NPS score.
- Developed a random forest model for NPS predictive analytics.
- Key-phrase extraction & sentiment analysis using Azure text analytics on customer feedback to identify key claims factors.

Software Engineering Intern, Ather Energy

Mar, 2017 - July, 2017

- Worked on JIRA API for Python to implement automation functionalities for the program team.
- Worked on SailsJS framework to build a data visualization portal from the JIRA issue tracking data.
- Worked for the data intelligence team with REST API, ElasticSearch, Kibana & Grafana.

Data Analytics Research Intern, Tech Mahindra

Aug, 2016 - Dec, 2016

- Worked on developing and evaluating data analytics projects with python for the e-learning website UpX Academy.
- Published white papers & e-books on data analytics.

Summer Intern, Indian Institute of Space Science and Technology

May, 2015 - July, 2015

Mentored by B.S. Manoj, Professor & Head, Dept. of Avionics, IIST

Project: Software Defined Delay Tolerant Network

- Analyzed the challenges of SDN in a high delay environment.
- A python-C based SDDTN module was deployed onto every switch using OpenFlow protocol which gets activated in the absence of central controller
- The module act as a light-weight controller which generates the flow for the switch & compute the plausible locations to store the packets in an isolated network.

TECHNICAL SKILLS

Strongest Areas - Data Analytics and Visualization, Software Engineering (Automation), Cognitive Networks

 ${\bf Languages} \text{ - Python, R, Javascript, Java, C++}$

Tools/Frameworks - Alteryx, Tableau, NodeJS, SailsJS, Shiny, Django, SAP, MochaJS, MAVEN, Selenium, Weka, Grafana, ElasticSearch, Kibana, Logstash, REST API, JIRA, Spark, Hadoop, Git, Semantic-UI, Bootstrap, POSTMAN, LATEX, MySQL, OpenGL, RYU, Open vSwitch, OLSR daemon

Relevant Courses

 ${\bf BU}$ - Computer Language Theory, Foundation of Analytics, Web Analytics & Mining, Artificial Intelligence, Data Analysis & Visualization, Data Mining, Software Engineering, Cloud Computing.

IIST - Computer Networks, Wireless Mesh Networks, Data Structures & Algorithms, Virtual Reality, Computer Organization & Operating System, Information Theory & Coding.

Codes available on github: https://github.com/amalrkrishna

- MBTA Data Visualization & real-time app: Adavanced data visualization methods with R & plotly was used on one week of MBTA data. Box plots, density plots, heat maps etc were ploted for travel, headway & dwell times. Real-time MBTA app was developed with R, shiny & leaflet which shows the realtime positions of the trains in all the subway lines with the intensity of train clustering.
- Job skill statistics in Django framework: Python, Django MVT framework & plotly was used to scrape large amount of Indeed data and make a data-driven website. I was the team co-ordinator for Integration and Quality Assurance. I also worked on the plotly data visualizations and the website UI using Bootstrap.
- Boston Property Assessment: Boston property assessment dataset from Boston.gov classifies properties in greater boston area into it's present overall condition (Poor to Excellent). 4 classification algorithms (Naives Bayes, Random Forest, IBk and Decision Table) were modeled using 5 different selection attributes using Weka. Performance measures such as TP Rate, FP Rates, ROC Area etc were used to determine the overall performance of each classifier model.
- Maze Runner 2.0: Navigation in a Virtual Environment using IMU MPU-6050. Developed a hardware implementation to navigate in a virtual environment developed in OpenGL using a low-cost Inertial Measurement Unit(IMU) MPU 6050.
- Software Defined MICRONet: A scaled down model of Software Defined MICRONet(Mobile Infrastructure for Costal Region Offshore Communications & Networks) environment was emulated. Software Defined MICRONet architecture provides intelligent communication among physical boat clusters in the sea which will solve the technology challenges faced by the fishermen community.

Initiatives

ACM & IEEE Student Member

2015 - present

Computer Science Tutor — Chegg.com

2016 - 2017

 $Taught\ 150+\ students\ \&\ took\ 200+\ lessons\ through\ the\ platform\ in\ CS\ \&\ Python/C++/Java/JS\ Programming.$

Creativity Leader

2015

Conscientia 2015, Annual Astronomical & Technical Fest, IIST

Finance & Creativity Leader

2014

Dhanak 2014, Annual Cultural Fest, IIST