

# AMAL KRISHNA R

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## EDUCATION

**M.S. in Computer Science:** 2017 - 2019 (expected)

*Concentration: Data Analytics*

**CGPA: 3.75/4**

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 - 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.

**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

**Languages** - Python, R, Javascript, Java, C++

**Tools/Frameworks** - NodeJS, SailsJS, Shiny, Django, SAP, MochaJS, MAVEN, Weka, Grafana, Elasticsearch, Kibana, Logstash, REST API, JIRA, Spark, Hadoop, Git, SemanticUI, Bootstrap, POSTMAN, L<sup>A</sup>T<sub>E</sub>X, MySQL, OpenGL, RYU,

Open vSwitch, OLSR daemon

## RELEVANT COURSES

**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.

## SELECTED ACADEMIC PROJECTS

Codes available on github : <https://github.com/amalrkishna>

- **MBTA Data Visualization & real-time app** : Advanced data visualization methods with R & plotly was used on one week of MBTA data. Box plots, density plots, heat maps etc were plotted 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.
- **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 Coastal 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