Amrutha Hakkare Arunachala

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PROFESSIONAL EXPERIENCE

Software Engineer

Cisco Systems

Aug '15 - July '17

- Developed secure Authentication-Authorization-Accounting (AAA) solutions for Cisco's router kernel software and deployed the same to enterprise customers like Swisscom. **Gained expertise in**: C, Linux, Algorithms
- Worked as the lead development engineer to resolve LDAP server authentication issues with Republic services customer that remained unresolved from more than a year.
- Developed an application to simulate 1000 routers working in parallel to test Fog applications on scale.

Technologies used: Network programming, Java, VertX, Angular JS.

Researcher ThingQbator, Cisco Nov '16 – July '17

- Developed an innovative end to end system for precision landing of UAVs based on image identification.
- Developed a pedestrian detection system for surveillance drones.
- Programming languages and libraries: Python, OpenCV libraries

Intern Cisco Systems

Jan '15 - Jun '15

- Developed a web application to monitor live search nodes of 'Elasticsearch', an enterprise search engine.
- **Technologies used**: Socket programming, HTML, CSS, Java Server Pages.

EDUCATION AND RESEARCH EXPERIENCE

MS in Electrical and Computer Engineering, North Carolina State University

Expected graduation – **2019**

Research Assistant - EcoPRT

- Working on constructing Visual SLAM based 3D map for the autonomous transit system.
- Technologies, Tools and Libraries: RTABMap, VTK, Qt, Cuda, Zed SDK, OpenCV, Visual studio, C++

Bachelor of Engineering, Electronics and Communication Engineering, SJCE, India. GPA – 9.46 on 10.

2011-2015

TECHNICAL SKILLS

_	Programming Languages	C++, C, Python, Android, HTML, Javascript, MATLAB
	Libraries and Tools	OpenCV, RTABMap, VTK, Qt

TECHNICAL PROJECTS

- Contribution to Google Chrome store Developed a chrome extension "Session Saver" to save current session in browser, export and import sessions from other browsers. **Technologies used**: HTML, CSS, JavaScript, Chrome APIs.
- Emergency response Android app for 'Major League Hackathon' Designed and developed a social motive driven android application to help people in emergency situations. Technologies used: Android programming
- Virtual Stylist app for Myntra hackathon Built an end-to-end android application to suggest suitable styles to users based on recommendations. **Technologies used:** Hadoop, Android programming, Image processing.
- Punctuality based Automated Attendance system Demonstrated the use of face recognition in automating student attendance system with PCA, Viola Jones using OpenCV libraries on Visual basic, C# and SQL.
- Image search engine Implemented a content based image retrieval system with 3D histogram image descriptor in HSV color space.

ROLES OF RESPONSIBILITY AND AWARDS

- Women's chess team captain at college led and managed a team of 5 players.
- · Campus ambassador at 'Let Me Know'.
- Recipient of "Benefit Everyone Connected recognition" award at Cisco.
- Ranked 23rd in National Talent Search Examination among 10000 students.

VOLUNTEER WORK AND COMMUNITY SERVICE

- Quant trainer, The Princeton review Trained prospective GRE and SAT students
- Volunteer, Bapuji Children's house taught English and basics of Computers to students.
- Volunteer, IEEE-Women in Engineering organized talks and events to motivate girls enter and sustain technical fields.