

EDUCATION

National Inst of Technology Karnataka	B.Tech Computer Engineering	Expected May 2017
GPA: 8.89/10.0		

INTERNSHIPS

Samsung R&D (Bangalore, IN)	Student Trainee	May – July 2016
<ul style="list-style-type: none">Member of the SDK and Reference Applications team of the Tizen PF & Protocol Division.Built a new native Voice Recorder application for the mobile suite of the Tizen OS. Responsibilities ranged from developing system APIs to user interfaces.Added a circular image-cropping patch to the existing Image Editor application.		
MOOG ITC (Bangalore, IN)	Research Intern	May – July 2015
<ul style="list-style-type: none">Verified whether MOOG's flight control systems could adapt to multicore architectures.Designed a real-time multicore scheduling algorithm for flight systemsDeveloped a primitive Linux-based, multicore operating system for NVIDIA's Jetson TK1 chip.		
Xerox IT Services (Bangalore, IN)	Software Engineering Intern	May – July 2014
<ul style="list-style-type: none">Developed test cases using Selenium WebDriver.Developed Liferay portlets to monitor servers and onboard new customers.Integrated Nagios XI system monitoring tool with the cloud portal.Worked on load balancing and redundancy mechanism for Xerox data centers.		

TECHNICAL SKILLS

Programming Languages	Frameworks and Tools	Web Development	Databases And Operating Systems
Java; C/C++; Python; Julia; JavaScript; PHP	ns-3; Tizen SDK; Liferay; Git; Selenium WebDriver	Django; Laravel; J2EE; AngularJS; JQuery	MySQL; MongoDB; PostgreSQL; Linux; Windows

PROJECTS

Bachelor's Thesis

- Developing a new TCP variant to improve the throughput in wireless networks.
- Makes use of ACK Division (a network security attack proposed by Prof Savage of UCSD).
- Leveraging positive aspects of this attack to combat the drawbacks TCP's congestion control mechanisms in wireless networks.

Concat: A Catalog for Conferences

- I contribute to the development of a [website](#) that matches academics to conferences in their research areas.
- Scaled the website horizontally on AWS, using the Elastic Beanstalk, S3 and CloudFront services.

NetworkViz.jl

- A Julia module to visualize graphs in 3D, tightly coupled with LightGraphs.jl.
- This module was presented at [JuliaCon-MIT](#).
- Also published a technical [paper](#) in [SCSC '16](#).

VirtTorrent

- A BitTorrent like protocol for high-speed inter-VM file distribution with minimal network congestion.
- Published technical [report](#) in [ICC '16](#).

GCPiN: Group Caching for Privacy in NDN

- A new network architecture for Named Data Networking to increase the privacy of cached content.
- Secures the Content Store with minimal performance loss.

ns-3 Contributions

- Developed a patch for a wormhole attack. Induced the attack by modifying the AODV protocol.
- Developed a patch for a novel TTL-based DoS attack.