
EDUCATION

- **Georgia Institute of Technology** Atlanta, GA
Master of Science in Computer Science (Computing Systems Specialization); GPA n/a Aug 2018 – Exp May 2020
 - **Courses:** Advanced Operating Systems, Big Data Systems, Computer Networks, Network Security
- **Birla Institute of Technology and Science, Pilani** Goa, India
Bachelor of Engineering in Computer Science; GPA 8.64/10.0 Aug 2012 – May 2016
 - **Courses:** Operating Systems, Computer Architecture, Data Storage Tech and Networks, Network Programming

SKILLS

- **Programming and Tools:** C++, C, Objective-C, Git, bash, HTML5, CSS3
- **Environments:** Linux, MacOS, Windows

WORK EXPERIENCE

- **Intuit** Bangalore, India
Software Engineer II Jan 2018 – July 2018
 - Cross-platform software developer for the TurboTax Desktop product for 5 million Windows and Mac customers.
 - Implemented and integrated a new technology stack built from scratch in C++ aiming to replace the existing legacy model. Also built a contingency module in Objective-C to ensure no negative customer impact.
 - Earned an Engineering Excellence Award for resilient rollout of the stack to half a million customers with zero customer issues.
- Software Engineer I** Aug 2016 – Jan 2018
 - Designed and developed critical business features on TurboTax Mac and Windows, such as recording hidden metrics to prevent fraud in e-filed tax returns, and a re-imagined co-browse feature used by at least 150,000 customers.
 - Owned the development of a standalone C++ library for use across Intuit teams and products with 95% code coverage and zero bugs in production.
- Software Engineering Intern** May 2015 – July 2015
 - Implemented a location-based service in Java to auto-populate address in the TurboTax Android application.
 - Developed an internal web application in PHP and Java/Android to produce expected screenshots of screens described by JSON representations.

PROJECTS

- **Energy Estimation of High-Performance Computing Applications**
Research thesis on prediction of energy consumption of an NVIDIA CUDA kernel through static analysis of compiled PTX code and power modelling of benchmarks on an NVIDIA GPU.
- **DTLB: Deterministic TLB for Tightly Bound Hard Real-time Systems**
Deterministic translation lookaside buffer (DTLB) and cache design and simulation for hard real-time systems, to eliminate inter-task interference and obtain dynamic energy savings. DTLB paper published in IEEE VLSID 2017.
- **Real-Time Operating Systems – Scheduler Design**
Implemented an Earliest Deadline First Scheduler with Stack Resource Policy (EDF-SRP) in C for a real-time operating system. Implemented a memory simulator GUI in Java to simulate the memory footprint of a task schedule. Extended the scheduler to perform dynamic slack time extension and minimize context switches for real-time tasks.
- **Raspberry Pi Surveillance System with Android Interface**
Implementation of a surveillance system in Python using a Raspberry Pi Camera monitored through an Android app.
- **Linux Kernel Mouse Device Driver Implementation**
Implementation of a kernel device driver module in C to change the brightness of the screen through mouse clicks.

HONORS AND ACHIEVEMENTS

- **Engineering Excellence Award:** Intuit, Apr 2018
- **Winner, Intuit HackUtsav 2017:** Intuit, Jul 2017
- **All-India Rank 17:** National Cyber Olympiad, Jun 2011