
EDUCATION

- **Georgia Institute of Technology** Atlanta, GA
Master of Science in Computer Science (Computing Systems); GPA 4.0/4.0 Aug 2018 – Dec 2019
 - **Courses:** Advanced Operating Systems, Computer Networks, Network Security, Big Data Systems, Intro to Information Security, Advanced Software Engineering, High Performance Computer Architecture, Graduate Algorithms, Data and Visual Analytics
- **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, Git, bash, HTML/CSS, Objective-C, Java (familiar), Python (familiar)
- **Environments:** Linux, MacOS, Windows

WORK EXPERIENCE

- **Intuit**
 - Software Intern, San Diego, CA** May 2019 – Aug 2019
 - Implemented a fast and scalable approach of mocking existing integration tests by recording and replaying responses using an open source framework, Wiremock, as a part of the Core Tax Services backend team.
 - Integrated it into five services, speeding up tests by upto 400% and eliminating arbitrary build failures.
 - Software Engineer II, Bangalore, India** Feb 2018 – Jul 2018
 - Software Engineer I, Bangalore, India** Aug 2016 – Jan 2018
 - Implemented and integrated a new technology stack into the TurboTax Desktop product for Windows and Mac. The stack was built from scratch in C++ aiming to replace a legacy model.
 - 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.

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. Paper published in ISPA 2018.
- **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. Paper published in IEEE VLSID 2017.
- **PromotEd**
Built a visual interface which recommends courses from multiple online course providers based on desired job roles. Used Python for machine learning algorithms, React, and shell scripts to collect data from MOOC APIs.
- **Pomodoro Time Tracker Web Application**
Built the web application front-end for a time-tracker productivity application using React.
- **MapReduce Infrastructure using gRPC**
Implemented a MapReduce simulation in C++ by using gRPC for communication in a distributed service.
- **vCPU Scheduler and Memory Coordinator for Virtual Machines**
Implementation of a scheduler and memory coordinator to dynamically manage resources assigned to each guest OS running on a hypervisor in a virtualized setting in C.
- **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