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**EDUCATION**

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- **Georgia Institute of Technology** Atlanta, GA  
*Master of Science in Computer Science (Computing Systems Specialization)* Aug 2018 – Exp May 2020
  - **Courses:** Advanced Operating Systems, Computer Networks, Network Security, Big Data Systems
- **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

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**SKILLS**

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- **Programming and Tools:** C++, C, Objective-C, Git, bash, HTML5, CSS3, Java (familiar), Python (familiar)
- **Environments:** Linux, MacOS, Windows

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**WORK EXPERIENCE**

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- **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 metrics for fraud prevention, and a re-imagined co-browsing experience.
  - 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 a tool in PHP and Java/Android to produce expected screenshots of screens described by schemas.

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**PROJECTS**

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- **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.
- **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.

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**HONORS AND ACHIEVEMENTS**

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- **Engineering Excellence Award:** Intuit, Apr 2018
- **Winner, Intuit HackUtsav 2017:** Intuit, Jul 2017