

Saushthav Saxena

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EDUCATION

- **Binghamton University, SUNY, Watson School of Engineering** Binghamton, NY
Master of Science in Computer Science; 3.89/4.00 August 2018 – May 2020
- **Dhirubhai Ambani Institute of Information Technology** Gandhinagar, India
Bachelor of Engineering in Information and Communication; 6.22/10.00 August 2010 – May 2014

TECHNICAL SKILLS

- **Programming Languages:** Java, JavaScript (ES6), Ruby, C, Python, Haskell
- **Web Development/DB:** HTML5, Bootstrap, jQuery, PostgreSQL, GraphQL, Scss, Slim, MongoDB, Socket.io
- **Frameworks/Tools:** Ruby on Rails, ReactJS, ReduxJS, NodeJS
- **Testing/Automation:** Selenium, RSpec
- **Graduate Coursework:** Operating Systems, Data Structure and Algorithms, Computer Architecture, Programming Languages, Distributed Systems, Design Patterns, Machine Learning, Programming for the Web, Communication Networks

EXPERIENCE

- **RPA Electronics, Binghamton, NY | Graduate Research Assistant** January 2019 - May 2020
 - Developed custom Lorawan network stack for class-A devices after research. Applied data models to collected data for real-time classification and insight of sensor data.
 - Researched performance, scope and security of Lorawan Network Stack for low power IoT end nodes.
 - Measured communication latency for event-driven discrete event systems through RDMA. Benchmarked and integrated system with RDMA.
 - Reviewed code, leaded discussions and code walks, proctored and graded students in High Performance Computing.
 - Programmed with: **C, LoraWan, Unix Sockets, Arduino/Raspberry-Pi, RDMA, MPI, Multithreading, Unix programming**
- **Keepworks Technologies Limited, Bengaluru, India | Full Stack Developer** May 2015 - July 2018
 - Worked with designers and team members to develop single-page and monolithic, cross-browser, cross-platform compliant, RESTful web applications in agile-minded environment.
 - Built front-end of applications using traditional as well as using react, redux technology stack.
 - Developed and managed well-functioning databases (Relational, NoSql) and MVC based backend applications.
 - Designed, implemented, deployed, and maintained new APIs from scratch. Integrated third-party APIs, libraries.
 - Experienced with SAML, web Single Sign-on (SSO), OAuth and related authentication/authorization technologies.
 - Integrated various payment gateways like stripe, paypal, paytm, public banks etc. to applications.
 - Experienced with load balancing, pub-sub based message queues, highly available application architecture.
 - Deployed applications to production using Aws, Heroku.
 - Programmed with: **Rails, React, Redux, GraphQL, jQuery, Ajax, Html, Bootstrap, Sass, Slim, Github, Rspec, Heroku, Nginx, AWS (S3, EC2), Webpack, Grunt, Gulp, Foreman**
- **Tata Consultancy Services, Bengaluru, India | Assistant System Engineer** July 2014 - April 2015
 - Managed script failures, automation scripts, identified code gaps and fixed bugs for cloud tool Viper.
 - Developed backend for a banking application with factory pattern. Designed the system as part of company training.
 - Programmed with: **Dot Net, Python, Selenium, Jira**

ACADEMIC PROJECTS

- **Key-value store with configurable consistency:** Implemented a key-value store borrowing design from DynamoDB and Cassandra having configurable consistency level. Implemented hinted-handoff, read-repair mechanism for eventual consistency and google protocol buffer for communication.
- **Apex simulator:** Implemented simulators for in-order and out-of-order apex pipelines with data forwarding, register renaming, branching and integer, float, load/stores functional units.
- **Http chord server:** Programmed multithreaded server using unix sockets. Server was used to implement chord p2p distributed hash table.
- **Lexical Analyser:** Built a parser with semantic type checking for a context free grammar similar to C language.