Saurabh Singh

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Summary

An inquisitive engineer with a strong technical background and proven record of accomplishments looking for a leadership role that challenges technical and managerial acumen. Experienced in system design, capacity planning and implementation of software projects. I enjoy working closely with customers, product teams, security teams and external consultants to deliver the best results.

Technical Skills

- Programming: Golang, Python, Typescript, C/C++, C# and Bash scripting
- Technologies/databases/frameworks: Node.js, .NET Core, Django, Flask, MongoDB, Postgres, AWS EC2, Lambda, S3, React-Redux, Postgres, Cassandra, RESTful APIs, wss://, Firebase

Experience

Akamai Technologies Inc., Cambridge, MA
Senior Software Engineer, January 2018 – Present

- Designing & implementing new features for Akamai's Enterprise Application Access solution (MFA, OIDC, OAuth2)
- Engineering fast connectivity via Data Edge, Management Edge and Enterprise Connectors by on-ramping network traffic (Python, Golang, React-Redux, Electron). Read more.
- Developing Device Posture including integration with external services (e.g., CrowdStrike) to determine threat levels on network access
- Designing and rapid prototyping of new technology stacks to increase performance and lower costs

Boston University, Boston, MA
Research Software Engineer, January 2017 – Present

- Working on ExerciseCheck – a digital health system designed to support rehabilitation (JS, Electron, MongoDB)

Digi International, Boston, MA
Senior Software Engineer, March 2017 – December 2018

- Designed and developed Digi's latest industrial-grade LTE-A network router platform (Linux, Yocto, C/C++)
- Test-driven development with robust features tested thoroughly via automated functional tests (Python)

Ledvance, Wilmington, MA
Software Engineer Intern, May 2016 – August 2016

- Designed a lighting and sensor management system for 500+ smart devices (Node.js, Groovy, Sierra SDK)

Computer Sciences Corporation, Noida, India
Solution Manager, July 2012 – June 2015

- Spearheaded a team of 4 in delivery of multi-million-dollar IT infrastructure and end-user projects
- Assimilated latest VMWare, HDS, Citrix technologies to ensure CSC stood at the bleeding edge of IaaS offerings
- Achieved revenue targets consistently to obtain the highest employee rating for 2 years in a row

Education and Research

- Boston University, Graduate College of Engineering (Master's in Computer Engineering, 2017) GPA: 3.64
- Jaypee Institute of Information Technology, Noida, India (Bachelor's in Computer Science, 2012) GPA: 3.48

Research work and Publications

- Explore use of latest technologies (Infinadeck, Kinect) to solve medical rehabilitation problems. Read more.

Academic Projects

- Designed a restaurant suggestion system using Yelp Dataset and Machine Learning algorithms (Python, Flask, Linux)
- Designed a modified Trie data structure for keyword prediction and syncing data over the network (C#, TCP/UDP)
- Created an image processing web-app for medical rehabilitation of stroke patients (Kinect v2, Node.js)
- Created a cloud-based inventory management system using Agile Development Process (Node.js, RDBMS)
- Developed a QR/Bar Code reader using Swift for iOS 9/10 and using JavaScript for a web-app
- Designed an autonomous robot with indoor positioning using Raspberry Pi and Arduino (C++, Node.js, Linux)
- Evil-Linux: A proof of concept depicting how easy it is for system admins to steal sensitive data (C/C++, Linux)
- Developed a command-line Linux OS for mobile devices with audio playback capabilities (kernel v2.44)
- Created a cost-effective robotic surveillance system using Atmega-16 and Mini2440 dev. boards (C, JavaScript, wireless networking, Linux)
- Built a code editor for compilation of C code using GCC for touchscreen devices (Embedded C, Linux)
- Performed comparative study and implementation of different CPU cache models on PISA architecture (C)