

AADITYA UPPAL

Software Engineer @ Microsoft, Azure | Seattle, WA | Exp. 6+ Yr

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HIGHLIGHTS

- Focus areas: Web scale backend systems, Distributed Systems, Infrastructure, Scalable system design, Cloud Engineering, Full stack development
- Experienced Senior Engineer with fullstack experience, leading teams, end to end project planning, mentoring, active interviewer, fostering engineering collaboration & Inner source contributions
- Directorate of Technical Education Scholar
- Nationally ranked 37, Math Olympiad prize winner
- GPA: 3.89
- Samsung Research, Intern award - August 2015
- Proficiencies: C, C++, C#, Python, AngularJS, JavaScript, web stack, Android SDK

EDUCATION

Texas A&M University, College Station - Texas

August 2014 - August 2016

Master of Science, Computer Engineering

GPA: 3.89 / 4

■ Focus Areas: Algorithms, Game Theory, C++, Artificial Intelligence, Data Science, Python

■ Multiple Hackathons, Projects

National Institute of Technology - Hamirpur

August 2009 - May 2013

Bachelor of Technology, Electronics & Communication

GPA: 7.65 / 10

■ Served as President for University Technical Club SPEC, leading project collaboration initiatives and organising inter college tech festivals.

■ Scholarship: Directorate of Technical Education

■ Key Projects: Automated Dam warning system with GSM integration

EXPERIENCE

Microsoft - Redmond, WA

Software Engineer II, Azure - AD Authentication & Identity Gateway

February 2018 - Present

- Building web scale backend systems and services for cloud that handle billions of requests a day. Leading projects end to end for Azure Active Directory Auth, Mentoring
- Developing and designing scalable backend systems and service architecture for efficient traffic routing of authentication traffic
- Application layer reverse proxy that provides fault tolerance to services behind the proxy
- Developing and designing of a service resilient communication between various authentication and authorization services.
- C#, .NET, Powershell, Azure, Cloud services, VM scale sets, blob storage, Memcache

Factset Research Systems - Norwalk, CT

Software Engineer II, Core Web Frameworks

October 2016 - February 2018

- Built core framework and libraries with AngularJS for the next generation of high performance Web Applications at Factset. Key features: performance, modularity, faster development, enhanced user experience, efficient code reuse.
- Led initiatives in next gen Mobile framework project to build core UI components using VueJS and framework for better performance and UX
- Other projects included: design and development of components with cross browser compatibility, Initiative to ensure uniform functionality used across various Factset apps.
- AngularJS, Javascript, VueJS, web stack

Samsung Research & Development - New Delhi, India

Software Engineer II, Multimedia Software

July 2013 - July 2014

- Core contributor to development of Media Player built on open source Gstreamer framework for Samsung's Industry leading Smart Television Middleware based on the Linux operating system Tizen.
- C, C++, Linux

Intel - Austin, TX

Master's Level Graduate Intern, Intel Atom CPU Software

January 2016 - August 2016

- Developed software for performance optimization of low power Intel Atom CPU
- Automated optimization of slack timings in different CPU paths, Built software to flag bottlenecks in CPU design components e.g. wire lengths, latch recoveries, parasitic capacitances etc.

Samsung Research & Development - Austin, TX

System Architecture Intern

May 2015 - August 2015

- Developed C++ backend systems to stress test android tests and random assembly instruction tests for Samsung's state of the art processor and interconnects. Debug & Validation team.
- Developed Android app to simultaneously preview camera multiple times along with taking pictures and multiple video playback.
- C++, Android SDK

Defence Research & Development Organization - Bangalore, India

Engineering Intern, Electronics and Radar Development Establishment (LRDE)

May 2012 - July 2012

- Completed design and development of Radar Controller Software on Power PC based hardware using Linux Kernel
- Designed Azimuth over Elevation System Stabilization of Radar on Aircraft using Fuzzy Logic
- C++

PROJECTS

Bus routing information application for Android

- Built an android application that provides information of best available routes between two points that uses multi-threaded graph search to get faster results.

Survey Data Management, 2015

- Developed an end to end Software As A Service. Involved working on legacy code using agile methodology to implement a service that displays a graphical view of user data aggregated through surveys and provides different hierarchy of users using Ruby on rails.

A heuristic based Blocks Word game solver, 2015

- Used A-star search algorithm that optimized the search for goal state in game by implementing multiple heuristics to provide an optimal path solution.

Implementation and performance comparison of informed and uninformed search algorithms, 2015

- Implemented heuristic based search algorithms like a-star, greedy best first and compared their performance with uninformed search like bidirectional, depth and breadth first search.

Twitter Trending News application for Android, 2014

- Built an android application that provides twitter-based news feed according to latest trends on twitter.

Optimizing Cache performance using improved Dirty Block Index system, 2014

- Optimized and Evaluated the performance of cache by removing the dirty bit from tag store and placing it in a separate dirty bit index.