

# AADITYA UPPAL

<http://github.com/aadiuppal>  
<http://aadiuppal.github.io>

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**Key Strength Areas:** Algorithms, Data Structures, Mathematics, Proficiency in Multiple Object Oriented languages, Full Stack Development, Distributed systems

**Languages/ Platforms/ Tools:** C, C++, C#, Python, AngularJS, JavaScript, HTML, CSS, jQuery, SASS, Android SDK, Java, Ruby on Rails, Git, Agile development, .Net

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## EDUCATION

**Texas A&M University, College Station, Texas**

Master of Science, Computer Engineering

August 2014 - August 2016

GPA - 3.89/4

**National Institute of Technology (NIT), Hamirpur**

Bachelor of Technology, Electronics and Communication

August 2009 - May 2013

GPA - 7.65/10

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## WORK EXPERIENCE

**Microsoft Corporation, Redmond, WA**

Software Engineer II, Azure AD Authentication and Identity -Gateway

February 2018 – Present

- Designing, Developing scalable web scale cloud services for efficient traffic routing and authentication.
- Cloud Infrastructure: Working on application layer reverse proxy that provides load balanced, fault tolerance.
- Designing, Developing Resilient communication services between various authentication and authorization services.
- Project planning, Mentoring.

**Factset Research Systems, Norwalk, CT**

Software Engineer

October 2016 – February 2018

- Developed a framework with AngularJS that gives new components, better code reuse, modular, faster development and enhanced user experience on a range of next generation Factset web apps.
- Responsible for design and development of various components with cross browser compatibility, uniform functionality used across various Factset apps.
- Developed mobile framework using VueJS that provides UI components for developing apps with enhanced user experience on Mobile devices.

**Samsung R&D, New Delhi**

Software Engineer 2

July 2013 – July 2014

- Primarily contributed to the 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.

**Intel Corporation, Austin, TX**

Master's Level Graduate Intern

January 2016 – August 2016

- Developed software tools to automate optimizing slack timings in different CPU paths for Intel Atom CPU.
- Developed tool to flag bottlenecks in CPU design components e.g. wire lengths, latch recoveries, parasitic capacitances etc.

**Samsung R&D, Austin, TX**

System Architecture Intern

May 2015 – August 2015

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

## **Defence Research & Development Organization, Bangalore**

Student 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

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## **HONORS / NOTABLE ACHIEVMENTS**

- Samsung R&D Intern award, August 2015.
- Department of Technical Education Scholarship holder, August 2009 – May 2013.
- Student body President for Society for Promotion of Electronics Culture at National Institute of Technology, Hamirpur. Took the lead on initiative to promote hands on robotics and programming.
- Consistent 100% in Mathematics board examinations for grade 10, 12. Regional Olympiad, NTSE Ranks: 37, 16

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## **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**

September 2015 – December 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**

October 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**

September 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**

October 2014 – December 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**

August 2014 – December 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.