

# AAYUSH UPPAL

Senior Software Engineer @ Bloomberg LP, Internal Systems and Web Applications | New York

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## HIGHLIGHTS

- Areas of focus: Building high performance distributed systems, Scalable system design, Real time data analytics pipelines and data insight applications
  - Other responsibilities: Leading a team, End to end project planning, Mentoring projects, Inner source and open source contributions
  - Directorate of Technical Education Scholar
  - Research Intern at National University of Singapore in one of the top solar research labs.
  - Served as Executive Student Member for TIFAC-CORE initiative under Dept. of Science and Technology, Govt. of India.
  - GPA 3.84
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## PROFILE

### **Bloomberg LP**

May 2016 – Present

Senior Software Engineer

Internal Systems and Web Apps

- Communication Systems
- New York, NY

- Responsibilities include design & development for distributed backend event driven systems, data products and pipelines.
- Business resource Prediction, Optimization and Allocation product with Recurrent Neural Networks, Linear Programming and Apache Spark
- Real time metrics platform using Kafka, Spark Structured Streaming HBase, Cassandra
- Lead Developer on Projects, Mentoring Projects, Interviewer
- Python, C++, Scala, Spark, Hadoop, JavaScript, SQL, Cassandra

### **Amazon**

May – August 2015

Software Development

Engineer, Intern

AWS – CloudFront

- Seattle, WA

- Designed and Developed a pipeline based on TCP Anycast for experimental requests, reduced IP space consumption and performance analysis.
- RTT data automated comparative analysis reports between TCP Anycast and Latency Routing.
- Java, Python, Perl, Kinesis, Elastic Map Reduce, Hive

### **SubBoard Inc – University at Buffalo**

October 2014 – December 2015

Web Developer

- Buffalo, NY

- Served as Web Developer for SubBoard Inc in University at Buffalo, A not for profit corporation providing a host of services for students.
- Responsibilities included developing and managing housing portal, legal portal, advertising and server administration.
- MySQL, WordPress, ASP.NET

### **University at Buffalo – State University of New York**

August 2014 – February 2016

Masters in Computer Science

GPA: 3.84 / 4

- Buffalo, NY

- Focus: Distributed Systems, Artificial Intelligence and Machine Learning
- Multiple hackathons, projects, part time developer as a Student Assistant.

### **Compro Technologies**

August 2013 – July 2014

Software Engineer

- New Delhi, India

- Worked on development of industry leading MyITLab teaching and learning platform. Developed key components for web module of the product.
- Agile, Web Services, Object oriented design, JavaScript, Java

**National University of Singapore**

May 2012 – July 2012

Researcher, Intern

- Singapore

- Summer intern at Solar Energy Research Institute of Singapore.
- Developed a raytracing simulation model for light trapping in solar cells.
- C++

**National Institute of Technology**

August 2009 – May 2013

Bachelor of Technology,  
Electronics and Communication

GPA 7.5 / 10

- Hamirpur, H.P. - India

- Directorate of Technical Education Scholarship Holder
- Co-convenor INS & Controls
- Team leader, Electronics and Communication Engineering
- Executive Student Member, TIFAC Core Project
- Dam Warning System using GSM

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**PROJECTS**

- **News Search, Summarization and Analytics** 2014
  - Developed a news search system that supports story summarization, chronological and topical summarization.
  - Query Parser, Vector Space Model, Lex Rank Analysis, Latent Dirichlet Allocation, Solr, JavaScript, EC2
- **Simplified Amazon Dynamo - Replicated Key Value Storage** 2014
  - Designed and implemented a simplified version of Amazon Dynamo which provides linearizability, availability.
  - Quorum replication, failure handling (Java, Android, Socket programming, Multi-threading, Distributed Systems)
- **Hybrid Multi-Layer Perceptron Neural Network for Classification of Handwritten Digits** 2015
  - Classified Handwritten Digits by implementing Back-propagation algorithm for Multi-Layer Neural Networks, Naive Bayes Classifier, Logistic Regression with an accuracy of 96%. (Python, NumPy, SciPy)
- **Web Portal for TIFAC-CORE Online Transformer Monitoring and Diagnostics** 2012-13
  - Executive Member of TIFAC-CORE Chapter. Project under Dept. of Science and Technology, Govt. of India.