

# ATIF AHMED

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## EDUCATION

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### Columbia University in the City of New York

Sept 2016 - Dec 2017

Master in Computer Science, GPA: 3.92/4.00

*Relevant courses:* Machine Learning, Adv. Database Systems, NLP, Deep Learning, Distributed Systems, Computer Vision

### National Institute of Technology Karnataka, Surathkal

July 2011 - May 2015

Bachelor of Technology in Information Technology, CGPA: 9.04/10.00

## EXPERIENCE

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### Petuum, Inc., Pittsburgh

*Software Engineer - Machine Learning*

Apr 2018 - present

- Worked on data ingestion and preprocessing using PySpark, Apache Livy, etc. for the main product which is an end-to-end platform that lets users create and deploy ML pipelines. Now working on the NLP side of Chest-Xray report generation.

### Uber Advanced Technologies Group (ATG), Pittsburgh

*Software Engineering Intern*

June 2017 - Aug 2017

- Worked on AVMaps team responsible for creation of 3D maps containing information like traffic lights, lanes (location, direction, connection with traffic light) with high precision for self-driving cars. Built a system for visualization of performance data to analyze possible performance issues with the map creation pipeline and create a memory usage prediction system.

### Samsung Research Institute Bangalore, India

*Software Engineer*

July 2015 - July 2016

- Worked on a project based on creating an intelligent model which learns the network characteristics and accordingly uses the properties of the best performing TCP variant. Worked at South Korea headquarters for a month to collaborate on a project aimed at reducing the power consumption in mobile hotspot tethering. Also worked on a project named CloudBooster for helping users manage multiple cloud storage accounts using ReST APIs and OAuth 2.0. Also developed code for a project aimed at reducing the channel changing time in TVs by connecting them in a P2P network.

### Indian Institute of Technology, Kanpur

*Summer Research Fellow*

May 2013 - July 2013

- The internship was focused on the development of P2P LAN based drawing and teaching application. Tasks included finding and rectifying network based problems which occur when many users are using shared resources.

## SELECT PROJECTS

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### Building a fault-tolerant distributed key-value store.

Sept 2017 - Dec 2017

*Columbia University, Distributed Systems course project*

- Using Go to build a fault-tolerant distributed paxos based key-value store that shards over a set of replica groups.

### Comparing Methods to Promote Diversity in a Set of Vectors

Sept 2017 - Dec 2017

*Creative Machines Lab, Columbia University*

- Promoting diversity in a set of vectors and their application in LDA topic modeling, CNNs and multi-hop attention models.

### Cross-lingual embeddings for low-resource languages

Sept 2017 - Dec 2017

*NLP Group, Columbia University*

- Developing cross-lingual word embeddings for very low-resource languages and using them for sentiment analysis.

### Web service classification model by semantic and syntactic information

July 2014 - Nov 2014

*National Institute of Technology Karnataka, Surathkal*

- Developed a composite classification model which combined the syntactic information like tf-idf along with semantics based measures like term-relatedness to obtain class dependent vectors which were then fed to various classifiers. IACC publication.

## PUBLICATIONS AND HONORS

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- S. Kamath, A. Ahmed and M. Shankar, "A Composite Classification Model for Web Services Based on Semantic and Syntactic Information Integration", *Advance Computing Conference (IACC), 2015 IEEE International*, pp. 11691170, 12-13 June 2015.
- A.S. Mysore, A. Ahmed and several others, "Investigating the 'Wisdom of Crowds' at Scale", *Adjunct Proceedings of the 28th Annual ACM Symposium on User Interface Software & Technology*, pp. 7576, 8-11 Nov. 2015.
- Annual Merit Scholarship, Central Government of India. 2011-2015

## SKILLS

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Python, Java, C, C++, Go, MATLAB, Octave, PHP, js, MySQL, PostgreSQL, TensorFlow, Keras, PyTorch, React, GraphQL