ATIF AHMED

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Machine Learning Engineer with 4+ years of experience in producing robust code for high-volume companies. Experience with solving real world problems with machine learning, natural language processing and distributed systems. Effective interpersonal and communication skills for working independently and/or in teams.

EDUCATION

Columbia University in the City of New York Sept 2016 - Dec 2017
Master in Computer Science with Machine Learning track, 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

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. Worked on the NLP side of Chest-Xray report generation. Now working on industrial asset and process optimization using deep learning and evolutionary optimization.

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. 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 May 2013 - July 2013
Summer Research Fellow

· 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

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.

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

· 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

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