ABHISHEK MOHTA

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EDUCATION

Carnegie Mellon University - School of Computer Science December 2019
Masters in Computer Science
Coursework: Machine Learning*, Deep Learning*, Probability and Mathematical Statistics*, Computer Systems

Birla Institute of Technology and Science (BITS) Pilani, Goa, India July 2017
M.Sc. Economics, B.E. Computer Science, CGPA: 9.41/10
Merit Scholar - 8/10 semesters (top 2% of >600 students)

SKILLS

Programming Languages: C, Python, C#, Java, HTML, PHP, MySQL
Tools and Frameworks: CNTK, Git, Powershell, Visual Studio, Azure, Hadoop, PyTorch*

EXPERIENCE

Microsoft Research, Research Fellow, Bangalore, India July 2017 - June 2018
- Guide: Dr. Prateek Jain, Senior Researcher, Microsoft Research India
- Enhanced the PROSE framework (in MS Excel) with machine learned models replacing hand-written heuristics.
- Implemented Neural Guided Deductive Search (NGDS) - a hybrid of symbolic logic techniques and statistical models - using LSTMs in CNTK to prune branches in the synthesis process improving performance by >75%.
- Paper published at International Conference on Learning Representations (ICLR), 2018 and patent filed. [Link]

Microsoft Research, Research Intern, Bangalore, India Jan 2017 - June 2017
- Enabled Whole Program Analysis as a service - built a scalable and reliable end-to-end system to statically analyze code and find bugs leveraging Static Module Verifier (SMV).
- Successfully ran on the Windows drivers code base and found 350+ bugs - null pointers and use-after-free.

Amazon Development Centre, SDE Intern, Bangalore, India July 2016 - Dec 2016
- Created new features in the Automated Content Correction and Validation engine based on n-gram models.
- Implemented a part of the infrastructure for a feedback system to reduce manual intervention for data validation.

Microsoft Development Center, Summer Intern, Hyderabad, India May 2016 - July 2016
- Implemented a classifier to find new/missing restaurants in Bing leveraging query logs, achieved >90% accuracy.

Indian Institute of Remote Sensing, Summer Intern, Dehradun, India May 2014 - July 2014
- Implemented a tool to process satellite images and open-sourced the remote sensing software ERDAS.
- Implemented ML algorithms - SVM, K-means to build features of software like vegetation mapping & cloud cover.

SELECTED PROJECTS (GITHUB)

Development of integral systems components from scratch Carnegie Mellon — Summer 2018
- Implemented the malloc/calloc/free function, a proxy server with cache, a linux shell (tsh-tiny shell) and a generic cache simulator from scratch

Clustering terrorist attacks with optimized K-Means algorithm BITS Pilani — Spring 2016
- Built clusters of terrorist attacks leveraging the Global Terrorism database using Hadoop and Java
- Clusters based on location, casualties, target group, etc. were created, which closely resembled the ground truth.

Independent Projects 2015 - 2017
- Developed web portal to computerize management of manufacturing firm - handles >10 factories daily.
- Co-Founded Xinger - a fully automated online food ordering portal with a client base of >7000 and revenues >$25,000 in the 2 years of operation. Handled end-to-end development and operations.

EXTRA CURRICULAR ACTIVITIES

- Convener, Waves 2014 - Annual cultural festival of BITS Pilani - Led a team of over 300 to a successful festival.
- Regular debater, orator, Master of Ceremony and Model United Nations delegate