Noman Ahmed Sheikh

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EDUCATION

PRESENT	M.Sc. in COMPUTER SCIENCE **ETH Zurich**, Switzerland	GPA*: 5.7/6.0
MAY 2017	B.Tech in COMPUTER SCIENCE and ENGINEERING **Indian Institute of Technology Delhi**, India	GPA: 8.993/10
APRIL 2013	SSC (Class 12th), MP Board of Secondary Education St. Paul Senior Secondary School, Khandwa, India	PERCENTAGE: 91.6%

WORK EXPERIENCE

APR'19 - AUG'19 | **Lead Data Scientist at SPRINKLR, Gurugram**
Responsible for developing fast and scalable OCR system for processing incoming images at the scale of Twitter firehose

APR'18 - MAR'19 | **Data Scientist at SPRINKLR, Gurugram**
(1) Extracting Insights relevant to brands from social media messages (2) Faster-RCNN based approach to extract text from image without using GPUs (3) Smart Budget Allocation in Facebook Advertizing using Reinforcement Learning

JUL'17 - APR'18 | **Product Engineer at SPRINKLR, Gurugram**
Core Team Member
(1) Development of framework for publishing automated posts on social media networks. (2) Content management and retrieval for all the media stored in the system. (3) Development of marketing platform for creating, planning and scheduling content on social media.

MAY'16 - JUL'16 | **Research Intern at BIGDATA EXPERIENCE LAB, ADOBE SYSTEMS, Bangalore**
Usage Based Tag Enhancement of Images
To improve significance & reliability of image tags in content management system by: (1) Understanding context around images and derive semantic understanding of text. (2) Unifying top tags from image & associated text. Enhancing tags using external knowledge bases.

PUBLICATIONS

UAI'18 | **Lifted Marginal MAP Inference**
Vishal Sharma, Noman Ahmed Sheikh, Happy Mittal, Vibhav Gogate, Parag Singla
34th Conference on Uncertainty in Artificial Intelligence, Monterey, CA, USA

PAKDD'17 | **Usage Based Tag Enhancement of Images**
Balaji Vasan Srinivasan, Noman Ahmed Sheikh, Roshan Kumar, Saurabh Verma, Niloy Ganguly
21st Pacific-Asia Conference on Knowledge Discovery and Data Mining, Jeju, South Korea

BACHELOR'S THESIS

TITLE:	Lifted Marginal MAP Inference
SUPERVISOR:	Prof. Parag Singla
DESCRIPTION:	In this work, we present the first ever application of lifting rules for marginal-MAP (MMAP), an important inference problem dealing with domains having latent variables. We devised two lifting rules, Single Occurrence (SO) and Binomial, originally proposed for MAP and marginal inference, respectively.

Major Projects

Prof. Martin Vechev Oct 2019 - Dec 2019	**Verification of Neural networks (ETH Zurich)** Developing a precise and scalable automated verifier for proving the robustness of fully connected and convolutional neural networks with rectified linear activations (ReLU) against adversarial attack. Verifier was able to verify images with 98.5% accuracy on MNIST.
Prof. Huzur Saran May 2015 - Jul 2015	**Summer Undergraduate Research Project at IIT Delhi, New Delhi** *Secure platform for Cloud Storage Consolidation & Data Privacy* Effective platform which allows user to avail cumulative data from multiple clouds (Google Drive, Dropbox). For security, data was decomposed using Fountain Codes. RaptorQ was used for its implementation. Provides data availability in severe cases like cloud failure. Absence of any centralised server makes it more secure.
Prof. Parag Singla Jul 2016 - May 2017	**Fine Grained Learning in Markov Logic Networks** Markov Logic combines First order logic & Markov Networks to capture relationships and uncertainties. Traditional methods tie the parameters of all groundings of first order formula.Objective is to identify hidden subtypes among constants present in the data and exploiting it to tie the parameters of subsets of groundings of a first order formula.
Prof. Huzur Saran Dec 2015 - May 2016	**IIT Delhi Log Management System** Developed system to monitor all sessions in IITD network using ARP information in network switches & routers. Identifying users responsible for illegal downloads over network. Currently being used by CSC, IIT Delhi to detect potential misuses.

Scholastic Achievements

- Summer Undergraduate Research Award for the Project "Secure platform for Cloud Storage Consolidation & Data Privacy"
- IITD Semester Merit Award: Recieved scholarship for being in top 7 percentile of the institute for first semester (2013)
- Secured All India Rank 480 in JEE(Advanced) among 150k students qualified in JEE(Main)
- Secured All India Rank 870 in JEE(Main) among 1.5 million students
- Secured All India Rank 19 in National Level Science Talent Search Examination
- Awarded Scholarship by Chief Minister for securing State Rank 2 in MP-PPT Examination
- Olympiad: Placed among top 1% candidates in NSE of Physics and top 10% candidates in NSE of Astronomy
- Awarded Scholarship by MPBSE for meritorious performance in Class 12th.
- Completed all 5 levels of Google Foobar Challenge.

Language Skills

Hindi:	Native
English:	Level-C1 (TOEFL Score: 110)

Technical Skills

Basic:	PHP, mySQL, HTML, Linux, ubuntu, LaTeX, Prolog, ML-Lex, ML-Lacc, SQL
Moderate:	Java, Python, C, C++, Matlab, SML, R