

EDUCATION

- PhD in Computer Science Sept 2019 - Present
[DataLab](#) at Northeastern University, Khoury College of Computer Sciences GPA: 3.917 / 4
Advised by: Dr. Wolfgang Gatterbauer, Dr. Mirek Riedewald, Dr. Renée Miller
- Bachelor of Engineering (Computers) 2015-19
Thadomal Shahani Engineering College, University of Mumbai GPA: 9.15 / 10
Bachelor's Project: 3D Facial Reconstruction using a single 2D Image
Advised by: Dr. Archana Patankar

PUBLICATIONS AND PREPRINTS

- Towards a Dichotomy for Minimally Factorizing the Provenance of Self-Join Free Conjunctive Queries
Neha Makhija, Wolfgang Gatterbauer
[\[Arxiv\]](#)
- Loch Prospector: Metadata Visualization for Lakes of Open Data
Neha Makhija, Mansi Jain, Nikolaos Tziavelis, Laura Di Rocco, Sara Di Bartolomeo, Cody Dunne
Short Paper at IEEE VIS 2020
[\[IEEE VIS\]](#) [\[OSF\]](#) [\[Video\]](#) [\[Teaser\]](#) [\[Webpage\]](#)

EXPERIENCE

- Summer Research Intern May 2021- August 2021
IBM Research, Yorktown Heights
Mentor: Udayan Khurana
- Machine Learning Intern November 2017- August 2018
Ushva Clean Technology
Researching and developing an energy disaggregation (NILM) model using deep learning networks for the solar inverters produced by the company.
- Software Development Intern June 2017- July 2017
NDS Global
Developed 3 Proof of Concepts for a client J B Hunt in a transportation logistics project using Spring framework, Apache Camel and ActiveMQ.

HONOURS & AWARDS

- Graduate Fellowship, Northeastern University 2019
- Principal's Award of Excellence, Thadomal Shahani Engineering College 2019
- Leadership Award, Thadomal Shahani Engineering College 2019

GRADUATE COURSEWORK

Advanced Algorithms, Large Scale and Parallel Data Processing, Scalable Database Management, Information Visualization, Distributed Systems

POSITIONS OF RESPONSIBILITY

- Co-founder, TSEC CodeCell 2017-18
Lead a team of 22, organizing a hackathon, semi-weekly workshops, competitions, reaching 300+ students to promote competitive programming.
- Editor, College Magazine TSEC Synapse 2018
- Assistant Technical Head (Software), Computer Society of India -TSEC Chapter 2016-17

SKILLS

- Programming
 - Proficient: Java, Python, C, SQL, JavaScript
 - Beginner: Haskell, PHP, Shell Script, C++, C#, Q#, Arduino
- Machine Learning: Tensorflow, Octave/MATLAB
- Big Data: Hadoop MapReduce, Spark
- Web, Android and Windows Development
- Git, L^AT_EX
- Languages:
 - English: fluent
 - Hindi, Sindhi: native fluency
 - German: beginner

TOEFL: 119/120, GRE: 170V / 168Q / 4.0W

A1 Certificate