SAVINAY SHUKLA

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EDUCATION

New York University, Tandon School of Engineering, Brooklyn, NY

Sept 2022 - Present

Master of Science in Computer Engineering

· Coursework: Machine Learning, Deep Learning, High Performance Machine Learning

Manipal University Jaipur, Jaipur, India

Jul 2015 - Jul 2019

Bachelor of Technology in Information Technology

· Coursework: Data Structures and Algorithms, Java, OOPS, Data Science

SKILLS

Languages: Java, Python, JavaScript, HTML/CSS, C++, SQL, NoSQL.

Tools and Framework: Angular, Node.js, Spring Boot, Struts, JUnit, PyTorch, Docker, REST, Git.

WORK EXPERIENCE

NYU Center for Data Science, New York City, NY

May 2023 - Aug 2023

Graduate Employee Adjunct

- · Section Leader for the course DS-UA 301: Advanced Data Science.
- · Guiding students in the implementation of deep learning frameworks such as TensorFlow and PyTorch.
- · Responsible for facilitating practical lab sessions and ensuring students' understanding of the frameworks.

New York University, Brooklyn, NY

Jan 2023 – May 2023

Graduate Course Assistant

- · Assisted Prof. David J. Pine in his course on scientific computation using Python.
- · Curated course content on the use of NumPy, Pandas, and Numba in computational chemistry.

IBM India, Bangalore, India

Dec 2019 - Aug 2022

Full-Stack Developer

- · Responsible for the development and deployment of API improvements primarily focused on application migration.
- · Collaborated with multiple development teams to deliver fast and robust solution prototypes.
- · Improved a full-stack web application to incorporate real-time tracking and reporting of industrial cargo.
- · Transformed source modules and schemas to increase report generation performance by 70%.
- · Introduced modern UI modifications for users to upload and analyze cargo data easily.
- · Awarded "IBM Gold Champion Learner 2020" recognition for a continuous learning initiative.

Morning Blaze Pvt. Ltd., Pune, India

Feb 2019 - Jun 2019

Data Science Intern

- · Coordinated research on prior implementations of time-series analysis on stock market data.
- \cdot Engineered modules and macros to automate technical analysis of stock market indices.
- · Responsible for collecting and analyzing structured and unstructured market sentiments.

PROJECTS

Distributed Dual Discriminator GANs, Brooklyn, NY

Apr 2023 – May 2023

Pytorch, Generative Models

- · Enhanced the DCGAN training pipeline for faster convergence by introducing another discriminator.
- · Achieved a 40% speedup in time to achieve optimal FID and IS Scores across CIFAR, MNIST and SVHN datasets.
- · Extended the prototype to a distributed environment using parameter-server architecture for multi-GPU training.

Clear View - Lightweight Dehazenet, Brooklyn, NY

Mar 2023 – May 2023

PyTorch, Computer Vision

- · Implemented depth-wise separable convolutions in the Dehazenet model to significantly reduce trainable parameters.
- · Achieved comparable model performance with Dehazenet with than 2000 trainable parameters and 8MB model size.

Market Watcher, Pune, India

Feb 2019 - Jun 2019

Python, Flask, TensorFlow

- · Developed a python based stock market recommendation engine using Pandas, Keras and Flask.
- · Incorporated global market indices and technical indicators as prominent features to reduce prediction errors.
- · Optimized engine across 300+ BSE companies, resulting in reduced prediction losses of up to 2%.