

SAVINAY SHUKLA

Brooklyn, NY | ss16924@nyu.edu | linkedin.com/in/savinayshukla | savinayshukla.github.io

EDUCATION

- | | |
|----------------------------------------------------------------------------------|---------------------------------|
| New York University, Tandon School of Engineering , Brooklyn, NY | Sept 2022 – May 2024 (expected) |
| <i>Master of Science in Computer Engineering</i> | |
| · Coursework: Machine Learning, Deep Learning, High Performance Machine Learning | |
| Manipal University Jaipur , Jaipur, India | Jul 2015 - Jul 2019 |
| <i>Bachelor of Technology in Information Technology</i> | |
| · 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 |
| <i>Graduate Employee Adjunct</i> | |
| · 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 |
| <i>Graduate Course Assistant</i> | |
| · 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 |
| <i>Full-Stack Developer</i> | |
| · 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 |
| <i>Data Science Intern</i> | |
| · Coordinated research on prior implementations of time-series analysis on stock market data | |
| · 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 |
| <i>Pytorch, Generative Models</i> | |
| · 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 | |
| ClearView - Lightweight Dehazenet , Brooklyn, NY | Mar 2023 – May 2023 |
| <i>PyTorch, Computer Vision</i> | |
| · 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 |
| <i>Python, Flask, TensorFlow</i> | |
| · 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% | |