Savinay Shukla

ss16924@nyu.edu | linkedin.com/in/savinayshukla | github.com/SavinayShukla

Education

New York University — Brooklyn, NY
Master of Science, Computer Engineering — *Sep. 2022 – May 2024 (expected)*

Manipal University Jaipur — Jaipur, India
Bachelor of Technology, Information Technology — *Jul. 2015 – Jul. 2019*

Technical Skills

Languages: Java, Python, C/C++, SQL, JavaScript, TypeScript, HTML/CSS
Developer Tools: VS Code, Eclipse, Google Cloud Platform, IBM Cloud Platform, Git, Docker, Maven
Frameworks: Angular, Node.js, Spring Framework, Apache Struts, Flask, Express.js, Vue.js

Professional Experience

Graduate Teaching Assistant — Sep. 2023 – Present
NYU Courant Institute of Mathematical Science — *New York City, NY*

- Spearheading support in implementing advanced deep learning systems within distributed environments using High-Performance Computers (HPCs)

Graduate Employee Adjunct — May 2023 – Aug. 2023
NYU Center for Data Science — *New York City, NY*

- Guided students in the implementation TensorFlow and PyTorch applications on HPC clusters
- Facilitated practical lab sessions and ensured students' understanding of the frameworks

Graduate Course Assistant — Jan. 2023 – May 2023
New York University — *Brooklyn, NY*

- 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

Full-Stack Developer — Dec. 2019 – Aug. 2022
IBM — *Bengaluru, India*

- Led the integration of web services and RESTful API enhancements, prioritizing application migration
- Collaborated with multiple development teams to deliver swift and resilient solution prototypes
- Empowered an Apache Struts 2 web application with real-time tracking and industrial cargo reporting
- Transformed source modules and schemas to increase report generation performance by 70%
- Awarded "IBM Gold Champion Learner - 2020" recognition for a continuous learning initiative

Projects

Distributed Dual-Discriminator GANs | *Pytorch, Generative Models, HPC* — Apr. 2023 – May 2023

- Optimized DCGAN training pipeline by introducing an extra discriminator for faster convergence
- Realized a 40% reduction in time for optimal FID and IS Scores across CIFAR, MNIST, and SVHN datasets
- Implemented a parameter-server architecture for distributed, multi-GPU training to scale the prototype

ClearView - Lightweight Dehazenet | *PyTorch, Computer Vision* — Mar. 2023 – May 2023

- Revamped the Dehazenet architecture by incorporating efficient depth-wise separable convolutions
- Attained on par model performance with less than 2000 trainable parameters and 8MB model size

Market Watcher | *Python, Keras, Flask* — Feb. 2019 – Jun. 2019

- Designed a Python-driven stock market recommendation engine leveraging Pandas, Keras, and Flask
- Integrated world market indices and essential indicators as pivotal features to minimize prediction errors
- Streamlined engine performance across 300+ BSE companies, resulting in reduced prediction losses of up to 2%