Savinay Shukla

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

EDUCATION

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

Manipal University Jaipur Jaipur, India
Bachelor of Technology in 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 Sciences *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 cross-functional teams to identify and address performance bottlenecks, resulting in a 15% improvement in application responsiveness
- Empowered an Apache Struts 2 web application with real-time tracking and industrial cargo reporting
- Optimized CI/CD pipelines, resulting in a 40% reduction in deployment time and a 25% increase in release frequency
- 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

Maersk's Shipper Portal | *Angular, Spring, Apache Struts* Apr. 2020 – Aug 2022
- Transformed a legacy web application into a microservices-based architecture on Spring
- Enhanced API backend to seamlessly integrate dynamic report generation, resulting in a remarkable 70% boost in report generation performance