

Savinay Shukla

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EDUCATION

New York University

Master of Science in Computer Engineering

Brooklyn, NY

Sep. 2022 – May 2024 (expected)

Manipal University Jaipur

Bachelor of Technology in Information Technology

Jaipur, India

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, SVN, Docker, Maven

Frameworks: AngularJS, Node.js, Spring Framework, Apache Struts, Flask, Express.js

PROFESSIONAL EXPERIENCE

Graduate Teaching Assistant

NYU Courant Institute of Mathematical Sciences

New York City, NY

Sep. 2023 – Present

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

NYU Center for Data Science

May 2023 – Sep. 2023

- Guided 35 students in the implementation of TensorFlow and PyTorch applications on HPC clusters
- Orchestrated engaging classes and informative lab sessions to ensure students' understanding of the frameworks

NYU Tandon School of Engineering

Jan. 2023 – May 2023

- 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

Software Engineer

IBM India

Bengaluru, India

Dec. 2019 – Aug. 2022

- 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
- Collaborated within an agile framework to perform code reviews and quality assurance, improving overall code quality by 20%
- 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