

# 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, Docker, Maven

**Frameworks:** Angular, Node.js, Spring Framework, Apache Struts, Flask, Express.js, Vue.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 Computers (HPCs)

*NYU Center for Data Science*

*May 2023 – Sep. 2023*

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

### Full-Stack Developer

*IBM*

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

### 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

### C-Match | *Angular Material, Spring, MongoDB*

*Jan. 2020 – Mar. 2020*

- Designed an Angular SPA to fetch real-time cricket scores and news
- Integrated Material UI along with robust user authentication within a microservices-based Spring backend