

# 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++, JavaScript, TypeScript, SQL, PostgreSQL, MongoDB, HTML, CSS

**Developer Tools:** VS Code, Eclipse, GCP, IBM Cloud, Git, SVN, Docker, Linux, UI/UX, REST

**Technologies:** Angular, React, Node.js, Express.js, Spring, Web Services, REST, AWS, Kafka, Kubernetes, Jenkins

## PROFESSIONAL EXPERIENCE

### Graduate Teaching Assistant

*New York University*

New York City, NY

*Jan 2023 – Present*

- Spearheading support in implementing advanced deep learning systems within distributed environments using High-Performance Computing (HPCs)
- Guided 40 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
- Assisted Silver Professor David J. Pine in organizing 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 India*

Bengaluru, India

*Dec 2019 – Aug 2022*

- Led successful migration of legacy Apache Struts 2 web app to Spring microservices architecture, enhancing scalability and performance
- Leveraged Java 8, Hibernate, and Oracle Database to create a robust and efficient backend for the microservices
- Implemented real-time tracking and industrial cargo reporting features, elevating functionality and user experience
- Spearheaded code reviews and QA within an agile framework, elevating overall code quality by 40%
- 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

### World On Wheels | *Angular, TypeScript, SQL, TailwindCSS*

Oct 2023 – Nov 2023

- Engineered a responsive car-rental front-end using Angular and TypeScript for an intuitive interface
- Integrated TailwindCSS for streamlined, visually appealing design, enhancing overall user experience
- Prioritized user-centric design, incorporating authentication and historical booking records for a personalized experience

### 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 Boot, 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