Savinay Shukla

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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, SVN, Docker, Maven
Frameworks: AngularJS, Node.js, Spring Framework, Apache Struts, Pytorch, TensorFlow, Flask, Express.js

Professional Experience

Graduate Teaching Assistant — New York City, NY
New York University — *Jan 2023 – Present*

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

Software Engineer — Bengaluru, India
IBM 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

World On Wheels | *Angular, TypeScript, SQL, TailwindCSS* — Oct 2023 – Nov 2023

- Engineered a responsive car-rental website 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