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++, JavaScript, TypeScript, SQL, PostgreSQL, MongoDB, HTML, CSS, Unix
Developer Tools: VS Code, Swagger, JUnit, jQuery, Mockito, Git, Version Control, Docker, UI/UX, Kubernetes
Technologies: Angular, React, Node.js, Express.js, Vue.js, Spring Boot, Jira, Web Services, AWS, Kafka, Jenkins

Professional Experience

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

- Spearheading support in implementing distributed deep learning systems within distributed environments using High-Performance Computing (HPCs)
- Mentored 40 graduate students in deploying machine learning and PyTorch applications on HPC clusters, fostering the creation of comprehensive end-to-end systems

Full Stack Software Engineer — Bengaluru, India
IBM — *Dec 2019 – Aug 2022*

- Led successful migration of legacy Apache Struts 2 web application to Spring microservices architecture, enhancing scalability and performance
- Collaborated on integrating web services and prioritizing RESTful API enhancements to streamline the application migration process
- 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 and test-driven development environment, elevating overall code quality by 40%
- Optimized internal 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 application using Angular and TypeScript for an intuitive interface
- Deployed the application on Google Cloud Platform (GCP) services, including Cloud SQL, Compute Engine, and Cloud Pub/Sub
- Integrated Sass, Material UI, and TailwindCSS for streamlined and visually appealing design.
- Implementing prioritized user-centric and responsive design, incorporating JWT authentication and historical booking records over HTTP for a personalized and seamless user 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 MVC
- Enhanced API backend to seamlessly integrate dynamic report generation using Jasper Reports, resulting in a remarkable 40% boost in report generation performance