

Shriraksha Byrasandra Srinivas

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EDUCATION

Master of Science in Computer Science.

August 2024 – May 2026 (expected)

University of Illinois at Chicago, IL.

- Coursework: Database Systems, Artificial Intelligence, Introduction to Data Science, Algorithms in Computational Biology, Advanced NLP, Quantum Computing, Human Computer Interaction, Deep Learning for Computer Vision, Thematic Analysis.

Bachelor of Engineering in Computer and Information Science, Bengaluru, India.

June 2024

TECHNICAL SKILLS

- **Programming languages:** Python, Java, JavaScript, C++, C, Apex, SQL, TypeScript.
- **Frameworks:** React, Next.js, Node.js, Express.js, HTML5, CSS3, TensorFlow, PyTorch, Scikit-Learn, pandas, NumPy, Matplotlib, Seaborn, FastAPI, Bootstrap.
- **Cloud & DevOps:** AWS (EC2, S3, Lambda, IoT), Azure, Jenkins, Terraform, Hadoop, MQTT, CI/CD, Docker Compose, Kubernetes, Microservices, REST APIs.
- **Big Data Engineering & Databases:** Spark, Airflow, BigQuery, Data Modeling, Schema Design, Kafka, Data Pipelines, ETL, Data Warehousing (Snowflake/Redshift basics), MySQL, MongoDB, PostgreSQL.
- **Tools & Other Technologies:** Git, GitHub, VS Code, IntelliJ IDEA, Android Studio, J2EE, Agile/Scrum, Unit Testing & Test-Driven Development.

PROFESSIONAL EXPERIENCE

Project Development Contributor | *G19 Studio, Chicago, United States*

June 2025 – Nov 2025

- Developed a multimodal **digital human twin** combining wearables, cognitive games, and **conversational AI**, for 92% readiness accuracy.
- Reduced forecasting error by **27%** via **LSTM time-series models** and **reinforcement learning** for personalized recovery.
- Built a **React Native frontend**, interactive Stroop game, and real-time visual dashboards, improving usability scores by **35%**.

Data Science Project Intern | *Unified Mentor, Bengaluru, India.*

April 2024 – June 2024

- Delivered actionable insights across three projects: Financial Analytics, Employee Attrition, and Heart Disease Diagnostic Analysis.
- Utilized advanced **Python libraries (Pandas, NumPy, Matplotlib, Seaborn)** for data preprocessing, analysis, and dynamic visualization.
- Implemented workflow optimizations, improving data processing efficiency by 25%, reducing analysis time.

Software Developer Intern | *Salesforce, Bengaluru, India.*

October 2023 – December 2023

- Automated maintenance requests for a client's RV fleet and developed robust **Apex** triggers and classes with 100% code coverage.
- Optimized scheduling and reduced downtime by 20%, with a system designed to handle bulk data processing.
- Integrated with a legacy warehouse system via **REST API**, enabling real-time inventory synchronization.

Custom Apps Project Intern | *DXC Technology, Bengaluru, India.*

July 2023 – October 2023

- Developed a dynamic **Full Stack** Application to streamline the real-time management, monitoring, and tracking of cargo containers.
- Boosted operational efficiency by 20% by automating workflows and enabling precise, real-time visibility into container movements.
- Engineered integration of technologies like **React, Next.js, REST APIs, and AWS IoT**, and delivered a scalable solution for cargo operations.

PROJECTS

AI Digital Twin Project (**Flutter, PyTorch, TensorFlow, Hugging Face, FastAPI, Docker**) | *Twinverse*

2025

- Engineered backend pipelines integrating cognitive-game ML models (85%+ accuracy in reaction) with user profiles for readiness scoring.
- Implemented Hugging Face LLMs via FastAPI microservices to generate adaptive training plans, reducing response latency by 30%.
- Deployed ML/LLM workflows in Docker, enabling scalable integration with Flutter and improving personalization effectiveness by 40%.

Data Analytics Project (**ML, Data Visualization**) | *Analyzing the Impact of Global Events on Stock Market Performance*

2024

- Applied ML models to analyze stock volatility and abnormal returns during COVID-19 and Russia-Ukraine events.
- Built event study & CAR visualizations to highlight market impact trends, improved classification accuracy to 87%, enhancing interpretability.

LLM Project (**Python, Hugging Face, PyTorch**) | *Scientific Question Answering Chatbot*

2024

- Fine-tuned T5 transformer on scientific QA datasets, boosting accuracy by +22% over baseline.
- Implemented an end-to-end NLP pipeline (data preprocessing → fine-tuning → inference), utilizing Hugging Face and PyTorch.
- Delivered a scalable, domain-adapted chatbot with 91% reproducibility and interpretability.

IoT & ML Project (**IoT, Sensors, Computer Vision**) | *IoT and ML Based Smart Cane*

2024

- Developed a smart cane for the visually impaired, integrating IoT sensors and ML to provide real-time object detection and feedback.
- Utilized GPS and sensor-based data to communicate proximity to obstacles, ensuring enhanced mobility and safety for users.
- Implemented computer vision algorithms to detect and avoid objects in the user's path.

Mobile Development Project (**Android Studio, Java**) | *Media Player Application*

2023

- Built an Android media player in Java with playback control, playlist management, and search, achieving 98% crash-free sessions.

CRUD Project (**Data Structures, Java, IntelliJ IDEA**) | *Product Catalog Management System*

2023

- Developed a catalog management system using B-Trees to optimize CRUD operations on product data, improving retrieval speed by 56.03%.
- Designed a modular and scalable file structure that supports large datasets, making the system suitable for e-commerce and retail environments.

Full-Stack Web Development Project (**MySQL, JavaScript, Bootstrap, PHP**) | *E-Commerce Management System*

2023

- Developed a full-stack e-commerce management system, enabling efficient product search, user navigation, and transaction processing.
- Integrated MySQL for DB management, developed the frontend and backend using JavaScript, Bootstrap, and PHP, for a responsive UX.

TECHNICAL CERTIFICATIONS

• Microsoft Certified: AI Fundamentals	2023
• Microsoft Certified: Azure Fundamentals	2023
• Capgemini: Advanced Java and J2EE	2023
• IIT Bombay Certified: PHP, MySQL, and Python	2023

PUBLICATION

- *IoT and Machine Learning based Smart Cane*, Adalya Journal, Volume 13, Issue 6, June 2024
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ACHIEVEMENTS AND AWARDS

• Social Development Volunteer at Youth for Parivarthan	2023-2024
• Third place in Hackathon on Azure Fundamentals.	2022
• Civil Rights and Social Acts Mentor at Janaagraha Center for Citizenship and Democracy	2022
• Harappa Certified: Communication Excellence Program	2022
