Rishika Shivanna

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EDUCATION

Binghamton University, State University of New York, Thomas J. Watson College of Engineering and Applied Science
Master of Science in Computer Science, Artificial Intelligence Track *Dec 2026*
Relevant Coursework: Data Structures and Algorithms, Database Systems, Machine Learning, Deep Learning, Cybersecurity

TECHNICAL SKILLS

Languages: Python, Java, C, SQL, Javascript, HTML, CSS, C++
Software & Operating Systems: Visual Studio IDE, Code, Git, GitHub, Jira, Figma, Power BI, macOS, Linux
AI/ML & Data Science: TensorFlow, PyTorch, Scikit-learn, XGBoost, Pandas, NumPy, Matplotlib, Model Evaluation
Frameworks & Libraries: Flask, React, Node.js, Tailwind CSS, RESTful APIs, Spring Boot, Angular, XML
Cloud & DevOps: AWS (EC2, IAM, S3), GCP (Compute Engine), Docker, CI/CD, Firebase, MongoDB (Atlas)
Concepts & Methodologies: Object-Oriented Programming (OOP), Data Structures & Algorithms, Microservices, RBAC

PROFESSIONAL EXPERIENCE

Maitra Medtech, *Junior Software Developer* | IISc, India *Aug 2024 – Dec 2024*
- Strengthened platform security for a healthcare web application by implementing role-based access control (RBAC) and refactoring API endpoints in collaboration with backend engineers.
- Optimized database query execution by analyzing slow queries, rewriting them with focused SELECT statements, and creating strategic indexes, decreasing average response time by 200ms and improving overall platform stability.

Aarnaq MedTech Private Limited, *Software Developer Intern* | IISc, India *Apr 2023 – Jul 2024*
- Developed a mobile application for law enforcement that automated field data entry by integrating camera functionality with OCR, cutting average report creation time from 15 minutes to under 5 minutes while minimizing data-entry errors.
- Customized and implemented interactive dashboards for program performance analytics using Firebase and Data Studio, reducing manual reporting requests from 50 to 30 per week with the goal of decision-making for care providers
- Defined standardized data pipelines through BRDs and UML diagrams, reducing ad-hoc database queries from 40 per day to 15 per day and supporting accurate reporting for government compliance audits

NeuraStim Smartphone, *UI/UX Designer Intern* | Delaware, USA / IISc Collaboration *Aug 2023 – Nov 2023*
- Designed 6 interactive Figma prototypes for a neuro-health monitoring app, optimizing onboarding and therapy session workflows tested by 20 users, reducing task completion time from 52 seconds to 35 seconds
- Integrated event-logging features in collaboration with developers to capture user interaction data for usability testing, reducing design iteration cycles from 4 days to 3 days
- Partnered with full-stack engineers to build responsive UI components using shared design tokens, ensuring WCAG 2.1 AA compliance and consistent cross-device performance during the pilot rollout.

PROJECT EXPERIENCE

Linux Chat Service (C Sockets + Multithreading) | Independent Project *Sep 2025*
- Architected Built a client–server application using TCP/IP socket programming in C, handling concurrent connections with pthreads.
- Managed memory buffers, protected shared resources, and implemented graceful shutdown logic.

Yelp Business Footfall Prediction | Independent Project *Aug 2025*
- Processed 1.94 million records using Pandas, NumPy to forecast store footfall trends
- Trained Random Forest and XGBoost models using SMOTE to address class imbalance, increasing accuracy from 0.75 to 0.88(AUC-ROC: 0.89)

Neuva Life Sciences Web Platform | Individual Project *Jan 2025*
- Created a React-based web platform using Vite and ESLint, reducing bundle size from 5MB to 3MB and ensuring responsive performance across devices

LEADERSHIP EXPERIENCE AND ACHIEVEMENTS

Super Learner – McKinsey Forward Program | McKinsey.org *Oct 2025*
- Completed Core Skills track focused on leadership, structured problem-solving, and communication excellence, applying these concepts to improve teamwork in technical projects

Event Coordinator – 24-Hour State-Level Hackathon | Global Academy of Technology *Jan 2024*
- Coordinated a 24-hour hackathon for 150+ student participants by organizing logistics, volunteer roles, and sponsor outreach, driving engagement in software innovation and collaborative problem-solving

Research Author – IJARSCT Journal Publication | Global Academy of Technology *Feb 2024*
- Conducted research on modern perception systems and authored a peer-reviewed publication, contributing to academic insights in sensor-based technologies and interdisciplinary engineering