# JEEVAN SHRESTHA

 $\mathcal{J}$  (206) 291-0589  $\square$  shresthajeevan<br/>880@gmail.com

#### **EDUCATION**

## Southeast Missouri State University

Master of Science in Applied Computer Science

GPA: 3.9/4.0, Cape Girardeau, MO

• Relevant Coursework: Data Structures and Algorithms, Advanced AI, Object-Oriented Design, Distributed Cloud Computing, Machine Learning, Advanced Programming Languages

Islington College Graduated: May 2022

Bachelor of Science in Computer Science

Kathmandu, Nepal

Graduated: May 2025

### TECHNICAL SKILLS

- Languages: Python, Java, Typescript, JavaScript/HTML5/CSS3, SQL, Scala
- Libraries/Frameworks/Databases: React.js, Django, Next.js, Pandas, Node.js, TailwindCSS, PostgreSQL, MongoDB
- Tools and Technologies: AWS (EC2, S3, RDS), Docker, Kubernetes, CI/CD, GitHub, Azure, Postman, Insomnia, Linux

#### **EXPERIENCE**

#### Graduate Research Assistant

August 2024 - May 2025

Southeast Missouri State University

Cape Girardeau, MO

- Researched and developed course materials on software supply chain security, focusing on threat modeling and vulnerability analysis
- Tested and evaluated open-source security tools including OWASP Dependency-Check, Threat Dragon, and SIEM systems for practical lab integration
- Created quizzes, case studies, and labs to teach risk assessment, dependency scanning, and secure software design principles
- Implemented and demonstrated a secure C login system using MySQL and Oracle with SHA256 hashing to illustrate real-world code vulnerability mitigation

### Software Engineer Intern

November 2021 - May 2022

Code Asterisk Pvt. Ltd.

Kathmandu, Nepal

- Built a Vue.js storefront with responsive design and performance optimizations, improving engagement in an Agile development environment
- Created frontend components with CI/CD integration and automated regression tests (Cucumber BDD)
- Collaborated with backend engineers on SQL/Oracle relational database structures for faster query performance

## PROJECTS

# AI-Chatbot | React, Node.js, Gemini API, MongoDB - GitHub

- Developed a real-time AI chatbot using **Gemini API** with **React** frontend and **Node.js** backend, ensuring real-time, context-aware responses
- Implemented secure authentication, API performance tuning, and monitoring tools
- Integrated MongoDB to store user interactions and session data, with Axios to improve API performance by 30%

#### Financial Fraud Detection | Python, Pandas, Scikit-learn - GitHub

- Engineered fraud detection models using **Logistic Regression** and Random Forest in **Python** to classify financial transactions
- Applied data preprocessing, feature scaling, and pattern analysis to optimize results
- Evaluated results using precision, recall, and F1-score with tools like Pandas, scikit-learn, and Matplotlib

## TB Chest X-ray Detection System | Python, Pandas, Streamlit - GitHub

- Built a web-based diagnostic tool using **Streamlit** to detect TB in chest X-rays
- Utilized DenseNet121 deep learning architecture and Grad-CAM for model explainability
- Preprocessed data using OpenCV and improved accuracy by 12% through data augmentation techniques