# SWASTIK GHOSH

 $Bangalore,\ India.\ \cdot swastikghosh1106@gmail.com \cdot 9131230644 \cdot \\ Linkedin:https://www.linkedin.com/in/swastik-ghosh-220a48209/\ ,\ GitHub:\ https://github.com/sg1106 \ ,Portfolio\ LLM:$ 

#### **EDUCATION**

### R.V. College Of Engineering

Bangalore, India

B.E (Bachelor of Engineering) Electronics and Telecommunications CGPA: 7.69

Kendriya Vidyalaya No. 1 Raipur

Senior Secondary (Class XII) Percentage: 85.6

Kendriya Vidyalaya No. 1 Raipur

Secondary (Class X) CGPA: 10

WORK EXPERIENCE

## Ernst & Young (Associate Technology Consultant- Cybersecurity)

Bangalore, India

(Data Science and Machine Learning Developer)

Aug, 2024 - Present

- Pioneered advanced LLM capabilities including secure code parsing, automated graph generation, dynamic PDF/Excel report creation, and RAG-based database connectors, dramatically boosting system performance, automation, and user experience.
- Designed and deployed a CyberRisk Quantification framework estimating monetary losses and financial exposure from cybersecurity threats with risk-adjusted mitigation recommendations.
- Developed an LLM Vulnerability Detection Tool with chatbot integration and frontend dashboard, enhancing real-time threat detection and contributing to the successful launch of two innovative cybersecurity products.

## Hitachi (Research Intern)

Bangalore, India

(Data Science and Machine Learning)

Aug 2023 - Nov 2023

- Developed and deployed machine learning algorithms for leakage detection by integrating sensor data (pressure, flow, temperature) with system topology.
- Achieved 97.5% accuracy in predicting leak locations and severity, significantly improving maintenance efficiency and response times

## SKILLS

Programming & Tools:: Python, R, SQL, MATLAB, Git, Flask, Python IDEs, VS Code, , Postman Data & AI Expertise:: Data Science, Machine Learning, Deep Learning, NLP, LLMs, Generative AI,

Databases & BI Tools: MongoDB, MySQL, Tableau, Power BI

Platforms & Design:: AWS, UI/UX Design, Figma

## Projects

## Finance AI Agent Python, HTML, CSS, Flask

Live Demo | GitHul

• Engineered an AI assistant delivering real-time stock updates, financial insights, and market history, enhancing investment decisions with personalized recommendations. Implemented trend analysis and stock suggestion logic using Finhub API for a tailored user experience.

## News Scraping & Fake News Detection Python, HTML, CSS, Flask

GitHub

Developed a web scraper to extract live news from BBC, followed by a machine learning-based fake
news classifier to identify misinformation. Integrated text analytics and classification models to evaluate
news credibility, bolstering media literacy and user trust.

## Sentiment Analysis Dashboard Python, HTML, CSS, Flask

Live Demo | GitHub

• Built a sentiment analysis tool that identifies positive/negative keywords, calculates text polarity, and visualizes insights with charts and word clouds. Delivered a complete frontend interface with HTML and inline CSS, ensuring interactive visualization and user-friendly sentiment exploration.

### Publication

• Multi-Model Financial Fraud Detection with Explainable AI Submitted in Financial Innovation in Springer

Link

• Machine Learning based Spectrum Sensing and Spectrum Management Using Blockchain International Journal of Scientific Research in Engineering and Management(IJSREM)

Link

## AWARDS

## Google Data Analytics

Google

EY Artificial Intelligence-Applied AI-Bronze Learning Badge

Ernst & Young