Vindhyaa Saravanan

vindhyaa.saravanan@yahoo.in | linkedin.com/in/vindhyaa-saravanan | github.com/Vindhyaa-Saravanan

Final-year Computer Science student with cybersecurity and cloud security experience, and hands-on AI, machine learning, and software development work. Proficient in Python with a focus on delivering real customer impact. Available full-time from July 2025.

TECHNICAL SKILLS

Languages: Python (Flask, Django, Streamlit), Java, HTML5, CSS3, JavaScript, (Next.js, React), SQL, C++, C
AI/ML Frameworks and Tools: TensorFlow, Keras, PyTorch, OpenCV, scikit-learn, Matplotlib, Seaborn
Cloud Platforms and Tools: Microsoft Azure, AWS, Google Colab, Git, VS Code, Colab, Jupyter, Jira, Azure DevOps, Vercel

EDUCATION

MEng, BSc Computer Science Expected Graduation July 2025
The University of Leeds *Leeds, England, UK*
- First, Second and Third Year Grades: First Class. On track for a First-Class Honours degree.
- Relevant modules: Machine Learning, Deep Learning, User Adaptive Systems, Data Science, Cloud Computing, Cryptography.

EXPERIENCE

Summer Intern, Process Automation June 2024 – August 2024
Schneider Electric Systems Middle East *Dubai, UAE*
- Worked with virtualization and application in industrial virtualized cybersecurity solution for SCADA systems.
- Facilitated Delivery Quality procedures and factory acceptance testing, contributed extensively to documentation.
- Tested SCADA software with simulated RTU devices to evaluate configuration accuracy and response times, improving testing efficiency by 20%.
- Created robust documentation for virtualized Acronis cybersecurity solution for emergency shutdown systems.

R&D Member of Staff - Apprentice June 2023 – August 2023
AVEVA Solutions *Cambridge, England, UK*
- Built Security and Platform Operations **DevOps** team-specific centralized visualization **Jira** dashboard, improving team performance and visibility.
- Monitored security alerts on Microsoft **Azure** Defender and **AWS** GuardDuty, improving team response time and incident resolution efficiency.
- Performed a cost analysis of existing **AWS** Backup solutions and contributed changes to **Terraform** IaaS codebase in **Azure DevOps** that reduced backup costs by 15%.

Summer Intern, Cyber Security July 2022 – September 2022
Schneider Electric Systems Middle East *Dubai, UAE*
- Gained hands-on experience in industrial control systems, network security, and cybersecurity within critical infrastructure.
- Delivered a training presentation on IEC-62443 cybersecurity standards to ensure compliance in industrial environments.
- Led a team of 9 in a qualitative analysis of SaaS licensing models for service providers, presented to company VPs, and secured 1st place for presentation skills and content quality.

PROJECTS

ChestMultiVision | *Python, Streamlit, Tensorflow, Keras* Oct 2023 – April 2024
- Developed several CNN models using transfer learning to perform multi-label classification on chest X-ray images.
- Created a custom label-balanced dataset through resampling and data augmentation from the NIH Chest X-ray dataset.
- Achieved a more **balanced AUC-ROC score** between 0.67-0.77 across all labels compared to previous state-of-the-art.
- Deployed best model in **Streamlit** web app for real-time chest X-ray diagnosis, live at https://chestmultivision.streamlit.app/.
- Optimized the application's model loading and inference time to improve user experience, and applied the **CRISP-ML(Q) methodology**, ensuring reproducibility and quality of the project.

Simulated Weather Sensor System | *Python, Azure Functions, Azure SQL Database* Nov 2023 – Dec 2023
- Simulated a serverless weather sensor system using **Python** and **Azure Functions** integrated with Azure SQL Server.
- Emphasized scalability and efficiency of solution, see https://youtu.be/FN5VSJ49zEE.

Vertex Sports Centre Application | *Python, Flask, Stripe API, Git* February 2023 – April 2023
- Developed functional and usable full-stack components for a Python Flask sports center management web application.
- Utilized **GitHub Actions** for **CI/CD** automation of a robust **pytest** suite upon every pull request.
- Designed intuitive UI and ensured compliance with **W3C WAI accessibility** standards and created the project's logo.
- Led efforts to improve team collaboration by resolving communication gaps and fostering informal coding sessions, which accelerated bug resolution and task completion.

VOLUNTEER EXPERIENCE

Science Editor, The Gryphon: | *Technical writing, communication, editorial, collaboration*
MEng Course Representative 2024/25: | *Leadership, problem-solving, cross-functional communication, conflict resolution*
STEM Conference Volunteer, Leeds WILS Society 2022, 2023: | *Teamwork, event management, diversity advocacy*