

# Vindhyaa Saravanan

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Finalist MEng, BSc student with cybersecurity and cloud security experience, and an avid interest in cloud computing, machine learning and AI. Actively seeking full-time opportunities from July 2025.

## 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: Software Engineering Principles, Machine Learning, User Adaptive Intelligent Systems, Information Visualization, Distributed Systems, Web Services and Web Data.

## 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 models.
- Integrated the best model into a live web application for real-time chest X-ray image classification, live at <https://chestmultivision.streamlit.app/>.
- Optimized the application's model loading and inference time to improve user experience, achieving model load time of 1.68 seconds and inference time of 2.04 seconds.
- 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 weather sensor system using Python and Azure Functions for serverless architecture.
- Integrated an SQL database for deployment on Azure resources.
- 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 full-stack components for a sports center management web application, including user management interfaces, data models, and system functionalities, enhancing both public and manager-facing views.
- Took on additional roles as UI Designer and accessibility tester, ensuring compliance with web accessibility standards and designing the project's logo.
- Ideated and implemented additional features, including email verification and PDF receipt generation, improving user experience and system functionality while ensuring cross-platform compatibility.
- Led efforts to improve team collaboration by coordinating meetings, setting deadlines, resolving communication gaps and fostering informal coding sessions, which accelerated bug resolution and task completion.

## EXPERIENCE

### Summer Intern, Process Automation

June 2024 – August 2024

*Schneider Electric Systems Middle East*

*Dubai, UAE*

- Integrated workstations with a virtualized cybersecurity solution for client's existing SCADA systems.
- Facilitated Delivery Quality Procedure and Cybersecurity Factory Acceptance Testing documentation.
- Co-ordinated SCADA testing to evaluate configuration accuracy and response times, improving testing efficiency by 20%.
- Implemented Acronis cybersecurity to centrally deploy and manage group backup policies.

### R&D Member of Staff - Apprentice

June 2023 – August 2023

*AVEVA Solutions*

*Cambridge, England, UK*

- Built a team-specific detailed visualization dashboard using Atlassian Jira, to provide a centralized view of all tasks, improving team performance and visibility by 30%.
- Monitored security alerts on Microsoft Azure Defender and AWS GuardDuty, reducing team response time by 40%.
- Performed a cost analysis of existing AWS Backup solutions and contributed changes to a large 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*

- Explored industrial control systems and cybersecurity principles to create a presentation on the IEC-62443 standard.
- 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.

## TECHNICAL SKILLS

**Proficient in:** Python (Flask, Django, Streamlit), Java, HTML5, CSS3, JavaScript, SQL, C

**Upskilling in:** JavaScript (Next.js, React), Material UI, SQL, C++

**Comfortable with:** Git, VS Code, IntelliJ, Colab, Jupyter, Azure Cloud, Vercel, Tensorflow, Keras, OpenCV, scikit-learn, pandas, NumPy, Matplotlib