

Vindhyaa Saravanan

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Final-year Computer Science student with expertise in AI, machine learning, cloud security, and software development. Strong problem-solving abilities with focus on customer impact. Passionate about using tech to solve real-world challenges in collaborative environments. 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 Visualisation, Data Science, Distributed Systems, Cloud Computing, Cryptography, Secure Computing, Advanced Software Engineering.

EXPERIENCE

Summer Intern, Process Automation

June 2024 – August 2024

Schneider Electric Systems Middle East

Dubai, UAE

- Streamlined FAT documentation and successfully improved cybersecurity testing efficiency by 20%, directly contributing to automation system development.
- Contributed to the evaluation of SCADA software performance, working with simulated RTU devices to test real-time system responses.

R&D Member of Staff - Apprentice

June 2023 – August 2023

AVEVA Solutions

Cambridge, England, UK

- Boosted **DevOps** team collaboration and efficiency for faster responses, by a centralized dashboard for task visualization on **Jira**.
- Optimized cloud security operations by actively resolving alerts on Microsoft Azure Defender and AWS GuardDuty, enhancing incident resolution efficiency.
- Achieved a 15% reduction in cloud backup costs, as seen in updated infrastructure, by refining AWS Backup solutions and contributing to the Azure DevOps Terraform codebase.

Summer Intern, Cyber Security

July 2022 – September 2022

Schneider Electric Systems Middle East

Dubai, UAE

- Expanded knowledge of industrial network security, demonstrated by delivering a comprehensive training session, through presenting IEC-62443 cybersecurity standards to internal teams.
- Led a 9-member team analyzing SaaS licensing models; secured first place in a VP-level presentation for impact, clarity.

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.
- Delivered a scalable, real-time diagnostic tool with **Streamlit**, 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

- Developed a scalable cloud-based sensor solution, reflected by system efficiency, through creating a serverless solution integrated with Azure SQL Database to store and process data.

Vertex Sports Centre Application | *Python, Flask, Stripe API, Git*

February 2023 – April 2023

- Developed functional full-stack components, with **API** and designing accessible UI compliant with **W3C WAI** standards.
- Utilized **GitHub Actions** for **CI/CD** automation of a robust **pytest** suite upon every pull request.
- 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: Improved editorial quality with a team of 10 writers to publish 20+ science-focused articles.

MEng Course Representative 2024/25: Resolved student concerns monthly by facilitating cross-functional communication between faculty and students, leading better student satisfaction.

WILS STEM Conference Volunteer 2022, 2023: Coordinated logistics for two 200+ attendee conferences, resulting in 25% faster event setup times.