

# SETHU PAVAN VENKATA REDDY PASTULA

London, United Kingdom

[sethupavan12@gmail.com](mailto:sethupavan12@gmail.com) [◇ LinkedIn](#) [◇ GitHub](#)

## EXPERIENCE

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### Microsoft

Software Engineer

October 2023 - Present  
*London, United Kingdom*

- Developing a RAG powered Copilot for a crucial product using Azure OpenAI to mitigate loss of product expertise during team transitions.
- Redesigned a critical product's IP clash checking mechanism to enhance the performance by 81.6%.
- Delivering fixes to critical production bugs raised by customers who serve our solutions to entire nations, ensuring robust and secure solutions that uphold a 99.999% reliability standard.

### Science and Technology Facilities Council (STFC)

Software Engineer (Placement Year)

July 2021 - July 2022  
*Didcot, Oxfordshire, United Kingdom*

- Developed a feature that enables running MATLAB scripts on a C++ software that analyzes data from a particle accelerator, expanding the reach of the software to the broader scientific community and increasing performance of MATLAB scripts by 10 times.

## EDUCATION

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**B.Sc Computer Science with Year in Industry**, Cardiff University

September 2019 - June 2023

**Dissertation:** Virtual Try-On with Deep Generative Networks - First Class Honours.

- Trained a GAN model capable of generating realistic humans with a given clothing item, [surpassing](#) State-Of-The-Art models on most benchmarks.
- Fine-tuned a novel Diffusion model to generate humans with clothing based on text input using ControlNet.
- Nominated as one of the top 10 finalists for the 2023 UK's [Undergraduate of the Year award](#) in Software Engineering.

## ACHIEVEMENTS

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**Second Place in Encode AI Hackathon 2024** - [Instagram live but AI agents are the people](#).

- Developed a React Native based mobile app that leverages a Vision Transformer, Microsoft Phi2, and LangChain to create an AI powered interactive livestream experience simulating social media fame.

**Runner's up in ETHGlobal Hackathon 2024** - [Decentralised Google Cloud but with AI](#)

- Developed a decentralised personal storage platform where you can store your personal files with outrageous privacy and you can also chat with your files using our R.A.G powered chat. Made with Solidity, LangChain, Phi2 and IPFS.

**Honourable Mention at Databricks Hackathon 2023** - [If Github Copilot were a browser extension](#)

- Developed possibly the first ever Chrome extension with R.A.G architecture to enable a chatting with any codebase you open on GitHub.

**Winner of the 2022 Cardiff NLP Hackathon** - [Pre-ChatGPT Era chat with your dataset AI tool](#)

- Developed an AI that can answer any question about a given dataset, reducing manual analysis time by 50%.

## SKILLS

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**Languages**

Python, C, C++, MATLAB, Java, Rust, JavaScript, SQL, Bash, LCEL.

**Technologies**

Azure, ReactJS, Kubernetes, Kafka, Django, PyTorch, JAX, LoRA, CUDA, LangChain.