Paul Jose

Ernakulam, Kerala, India M.Tech in Computer Science and Engineering

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EDUCATION

• M.Tech in Computer Science and Engineering

CGPA: 8.29/10

•B.Tech in Computer Science and Engineering

CGPA: 7.43/10

Sept 2024 - Sept 2026

Mar Athanasius College of Engineering, Kerala

Aug 2018 - Aug 2022

APJ Abdul Kalam Technological University, Kerala

EXPERIENCE

Research Intern

• NIT-Trichy

June 2025 - August 2025

Tiruchirappalli, Tamil Nadu

- -Conducting research on EEG signal classification for depression detection under the guidance of Dr. V. Sridevi, using real-world EEG datasets.
- -Designing and training deep learning models, experimenting with CNN and LSTM architectures to enhance classification accuracy and model robustness.
- -Deployed deep learning models on HPC clusters using SLURM workload manager; submitted and monitored batch jobs via sbatch, squeue, srun, and sinfo.

• AT&T Communications India Pvt. Ltd.

Nov 2022 - Nov 2023

Apprentice Network Engineer

Bengaluru, Karnataka

- -Manage enterprise routers and switches over SSH, leveraging Unix commands for configuration and verification of network devices.
- -Develop shell scripts for automating device logging and write Python scripts to streamline configuration management across network infrastructure.
- -Collaborated on Layer 3/Layer 2 segmentation using BGP, OSPF, VLAN.

PROJECTS

Adaptive Handover Optimization in Open RAN

GitHub

TensorFlow, TFLite, Python

M.Tech Mini Project

- -Developed an ML-based adaptive handover model using LSTM on the Berlin V2X dataset for predictive handovers in 5G networks, achieving 86.67% accuracy.
- -Compressed the model using structured pruning and quantization, reducing size by 87% for real-time edge deployment in Open RAN environments.

Seccomp-based System Call Filtering

GitHub

 $C,\ Linux,\ Seccomp$

Micro Project

- —Developed a system-level security module using Secomp to filter Linux system calls in real time for containerized workloads.
- -Enforced syscall whitelisting policies, reducing kernel attack surface and preventing unauthorized system access.

CCTV Deployment Optimization

GitHub

Python, PyQt5, ILP

Micro Project

-Created a PyQt5 GUI tool for ILP-based camera placement, ensuring 100% area coverage with 28.6% cost savings in synthetic urban layouts.

TECHNICAL SKILLS

• Programming Languages: Python, Java, C, Bash, SQL

• Google Cybersecurity Professional Certificate, Coursera

- Data Science & ML Frameworks: TensorFlow, TFLite, scikit-learn, Keras, Pandas, NumPy
- Systems & Networking Tools: Linux, Unix, SSH, Docker, Wireshark, HPC
- Version Control: Git, GitHub

CERTIFICATIONS

• Internship Programme on Computer Hardware maintenance and Networking, MBITS	2022
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• Introduction to Internet of Things, NPTEL Online Certification (Funded by MHRD, Govt. of India) — Score: 58 2022

• Python Full Stack Development, Pentagon Space Batch No.: PSO6DEC21PFS818

• Architecting with Google Compute Engine Specialization, Google Cloud (Coursera)

2022 2021

2024