Devansh Sharma

Bengaluru, India

+91-8437330408
devsarrawatia@gmail.com
GitHub/adawatia
LinkedIn/adawatia

Internships

•Indian Institute of Technology Guwahati *May 2023 – July 2023*
Research Intern – Dept. of CSE (MARS Lab) *North Guwahati, Assam*

- Accelerated DNN inference on Network-on-Chip (NoC) architectures using **Timeloop, C++, and Python**. Focused on AI hardware-software co-design and simulation.
- Achieved **23% latency reduction** through optimized data mapping and efficient memory scheduling.
- Built and validated NoC simulation models to test various DNN workloads under different network topologies.
- Contributed to academic research on AI accelerator design and architectural performance analysis.

•Growth Purple (Remote) *June 2023 – October 2023*
ML Engineer Intern *Hyderabad, India*

- Developed a generative AI-based **PDF chatbot** using **LangChain, Streamlit**, and **LLMs** for real-time document interaction.
- Integrated Retrieval-Augmented Generation (RAG) for enhanced context awareness in chat responses.
- Achieved **90% accuracy** in parsing and querying complex PDF formats across diverse client datasets.
- Reduced customer support queries by **35%** through seamless document Q&A automation.

Technical Skills

Programming Languages: Python, C++, Rust
Cloud & DevOps: Docker, Git, AWS (S3, Beanstalk), Google Cloud Platform (GCP)
Database Technologies: PostgreSQL, Firebase
Data Science & Machine Learning: PyTorch, NumPy, Pandas, Matplotlib, Scikit-learn
Frontend Development: Flet, Streamlit, HTML, TailwindCSS
Soft Skills: Problem Solving, Time Management, Team Collaboration, Communication
Interests & Hobbies: Linux, Cloud Computing, Artificial Intelligence, Karate, Reading, Video Games

Projects

•Big Defend *Jan 2025 - Ongoing*
An open source real-time cybersecurity incident response system using Big Data.

- Tools & technologies used: NumPy, Nmap, Requests, Scapy, Scikit-learn
- Developed a real-time cyber security incident response system leveraging Big Data technologies for efficient detection and analysis of security threats.

•CHIP-8 Emulator *June 2024 - July 2024*
A CHIP-8 emulator in C++

- Tools & technologies used: C++, SDL2, Low-Level Programming, Emulation
- Built a CHIP-8 emulator in C++ to replicate the functionality of the classic 1970s-era CHIP-8 virtual machine, accurately executing original CHIP-8 programs and games.

•PaperWise *June 2023 - Sept 2023*
Engineered an intelligent PDF assistant.

- Tools & technologies used: PySide6, Ollama, Langchain, Hugging Face API, Gemini
- Engineered an intelligent PDF assistant using PySide6, Ollama, and PyMuPDF for seamless document interaction, smart Q&A, and offline AI processing.

•Smart Parking & Toll Management System *Sept 2023 - Nov 2023*
Engineered an automated system using IoT components, RFID sensors, and real-time data processing.

- Tools & technologies used: Vega Aries v3.0, ESP8266, RFID, C/C++, Firebase
- Engineered an automated system with IoT components and RFID sensors for smart parking and toll management, incorporating real-time data processing to optimize vehicle flow.

Certifications

•Summer School on AI Technologies UUST, Russia *2024*
•AWS Cloud Architect AWS Academy Graduate *2024*
•Introduction To Internet of Things NPTEL *2023*
•Google IT Automation with Python Coursera *2024*
•NDG Linux Unhatched Cisco NetAcad *2023*
•Vega Processor Ecosystem C-DAC, IEEE India Council *2023*

Publications

- **A Cloud-Based Telemedicine Platform: Enhancing Healthcare Accessibility through Technology** *Dec 2024*
  International Conference on Progressive Innovations in Intelligent Systems and Data Science
  Published by IEEE Computer Society on IEEE Xplore

- **Efficient Parking & Toll Management: A RFID-Enabled Approach with Vega Aries Development Board** *Nov 2023*
  International Journal of Innovative Science and Research Technology
  Volume 8, Issue 11

Education

- **Bachelor of Engineering in Computer Science** *2021 – 2025*
  Chandigarh University, Mohali *CGPA: 7.76*
  Relevant Coursework:
  Core Computer Science: Algorithms, Data Structures, Computer Architecture, Operating Systems
  Data & Analytics: Big Data Analytics, Data Visualization, DBMS
  AI & Networks: Machine Learning, Computer Vision, Computer Networks

- **Intermediate (Non-Medical)** *2020 – 2021*
  Darshan Academy, Ludhiana (CBSE) *Percentage: 81.4%*

- **Matriculation** *2018 – 2019*
  Darshan Academy, Ludhiana (CBSE) *Percentage: 83.6%*