Devansh Sharma
Ludhiana, India

📞 +91-8437330408
✉ devsarrawatia@gmail.com
⭘ GitHub/adawatia
in LinkedIn/adawatia

INTERNSHIPS

•**Indian Institute of Technology Guwahati | Onsite**   *June - September 2023*
Intern - Department of Computer Science & Engineering (MARS LAB)   North Guwahati, Assam

– **Optimized Network-on-Chip (NoC) performance for Deep Neural Network (DNN) implementations.** Leveraged C++ and Python3 to analyze performance bottlenecks and develop mapping strategies for efficient DNN execution on NoC architectures.
(**Keywords:** Network-on-Chip, Deep Neural Networks, Performance Optimization, C++, Python)

– **Enhanced understanding of AI hardware-software co-design principles.** Gained valuable experience in the interplay between architectural design and mapping optimization, contributing to the development of efficient AI hardware accelerators.
(**Keywords:** AI hardware, accelerator design, co-design)

•**Growth Purple | Remote**   *June - October 2023*
ML Engineer Intern   Hyderabad, India

– **Developed a generative AI-powered interactive chatbots for clients..** Created an intelligent interaction system using advanced natural language processing techniques, enabling seamless data analysis with machine learning technologies.
(**Keywords:** Generative AI, LLM, Streamlit, Langchain, PDF Analysis, Machine Learning)

TECHNICAL SKILLS

Programming Languages: Python, C++
Web-Frameworks: Django, FastAPI, Streamlit
GUI Development: PySide
Tools: Docker, Git, AWS (S3, Beanstalk)
Machine Learning and Data Science:
Frameworks: PyTorch, Scikit-learn
Libraries: NumPy, Pandas, Matplotlib
Database: PostgreSQL, Firebase
Soft Skills: Time Management, Team Collaboration, Problem-Solving, Communication
Areas of Interest: Linux, Cloud Computing, Artificial Intelligence
Hobbies: 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 cybersecurity 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.

•**Interactive PDF Chatbot with LLM**   *June 2023 – Sept 2023*
Interactive PDF Chatbot with Machine Learning

– Tools & technologies used: Streamlit, Langchain, Hugging Face API, Gemini
– Developed a user-friendly Streamlit application enabling seamless interaction with PDF files through a conversational interface powered by Large Language Models (LLMs).

•**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*

PUBLICATIONS

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

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

EDUCATION

- **Bachelor of Engineering in Computer Science** *2021-2025*
Chandigarh University, Mohali CGPA: 7.8/10
Coursework: Operating Systems, Data Structures and Algorithms, Database Management Systems, Computer Networks, SDLC, Artificial Intelligence, Cloud Computing

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

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