

Hamza Paracha

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LinkedIn | GitHub | Portfolio

EDUCATION

University of Guelph

Bachelor of Computing - Honours Software Engineering
GPA: 3.6/4.0 | Area of Emphasis: Data Science

Key Focus Areas: Database Systems, Algorithms, & Data Engineering

Guelph, ON

Expected April 2028

CERTIFICATIONS

Microsoft Certified Azure Data Engineer Associate (DP-700)

AWS Certified Machine Learning Engineer - Associate (MLA-C01)

AWS Certified Cloud Practitioner (CLF-C02)

Python PCEP | AWS Certified Generative AI Developer - Professional (In Progress)

EXPERIENCE & PROJECTS

- **AI System Engineer (Internship)** | Innovance.ai Apr 2026 – Present
 - Designed and built a scalable AWS data orchestration backend from scratch using **Step Functions**, **Lambda**, **S3**, and **Bedrock Data Automation (BDA)**, enabling a cloud-native document parsing pipeline powered by LLM-driven understanding.
 - Defined schema contracts between preprocessing and extraction stages by specifying chunk structures and document metadata for deterministic execution across varied document types.
 - Implemented end-to-end traceability with session IDs, document IDs, and execution ARNs, improving monitoring, debugging, and troubleshooting across production runs.
 - Used GenAI for code review and generation, wrote CI/CD tests, and sped iteration from prototype to deployment.
 - Owned the orchestration layer from design through deployment and operations, partnering directly with founders on architecture trade-offs and production reliability.
- **Creator & Maintainer** | Warden: Autonomous Security Orchestrator (Open-Source) Nov 2025 – Present
 - Designed, built, and open-sourced Warden, an autonomous security CLI that bridges vulnerability detection and remediation, reaching **1,000+ downloads**.
 - Architected a distributed multi-agent system of Watchman, Engineer, and Diplomat agents coordinating over a shared task bus to automate **SAST/DAST** scanning, dependency patching, and the pull request lifecycle.
 - Engineered fault-tolerant workflows with retry semantics and **human-in-the-loop (HITL)** approval gates to ensure safe automated remediation before changes reach production.
 - Integrated **Snyk**, **npm audit**, and **Nmap** into a unified verification pipeline with automated tests, improving reliability and debuggability in complex systems.
 - Project Link: github.com/DevDonzo/warden
- **Penetration Tester (Internship)** | Sekurity-Partners Apr 2025 – Aug 2025
 - Built Python automation around **Nmap**, **Metasploit**, and **Wireshark** to run repeatable vulnerability assessments, reducing quantified security risk by over 20%.
 - Authored technical reports that translated findings into actionable engineering recommendations and improved root-cause analysis.

TECHNICAL SKILLS

Languages & SDE: Python (PCEP), Java, C++, OOD, DSA, REST APIs, Git, Linux, Agile (SDLC), CI/CD

Distributed Systems & Cloud: AWS (Step Functions, Lambda, S3, Bedrock, DynamoDB, Fargate), SQL, Monitoring, Troubleshooting

AI & Tools: GenAI, LangGraph, MCP, HITL, RAG, Docker, K8s, Pentesting, Kali Linux, Wireshark

ACTIVITIES AND LEADERSHIP

- **Co-Captain, AWS Cloud Club:** Led cloud workshops and mentored students on AWS deployments.
- **Core Member, GDSC:** Collaborated on cloud/AI projects and technical student workshops.
- **High School Coding Club:** Founded and scaled a student coding club to 30+ members.
- **University Lead & Open-Source Contributor, Zed Industries:** Lead a Rust-focused developer community, triage and fix assigned bugs, host technical events, and provide direct product feedback to the core engineering team.