



## ABOUT ME

With 3 years in Generative AI, Python, DevOps and Cloud Computing I'm a **modern tech polymath**. I believe excelling in one area boosts my ability to learn new skills and transfer insights across fields. I build ML models, optimize DevOps, and drive breakthrough research in Generative AI—spotting patterns and solving challenges with creative, cross-disciplinary methods. In today's competitive world, I'm dedicated to continuous learning and leveraging my diverse skills to drive innovation and add value to dynamic teams.

## EXPERIENCE


**Soliton Technologies** - Senior Project Engineer  May '25 - Present

- **R&D in AI-Driven Hardware Validation:** Currently designing AI systems for intelligent hardware testing, writing research papers, and presenting at AI conferences to drive innovation. Integrating the latest AI techniques into workflows and mentoring juniors to accelerate team-wide adoption.

**Soliton Technologies** - Project Engineer  Jun '23 - May '25


**Texas Instruments – Battery Management System**

- **AI Assistant Platform:** Built a tool to auto-generate test code from large Excel files, improving accuracy and reducing validation time.
- **Optimized Model Deployment:** Overcame OpenAI rate limits by deploying models across regions using Docker and Kubernetes, cutting latency from 300s to 10s.
- **Client Collaboration:** Coordinated with TI clients and developed a GUI to streamline validation workflows.

**Soliton Technologies** - Internship  Jan '22 - May '23



**Intel – Device Vision Platform**

- **ML-Powered GUI Tool:** Developed an offline ML-powered GUI tool using regression models to assist validation engineers in analyzing and predicting device performance, reducing manual effort and domain dependency by 90%.
- **Azure Migration:** Migrated the solution to Azure using Microsoft Fabric, automating the data pipeline (OneLake, Data Factory, Power BI), enabling real-time analytics and alerts cutting validation.

**Eureka** - Full Stack Web Developer (Internship)  Jul '21 - Feb '22

- **Full-Stack Development:** Built responsive web applications using React for frontend and Python for backend, enhancing API integration and user experience design.


## PROJECTS

**AI Academy**  - Co-Founder  Nov '24 - Present


A online platform offering interactive courses, real-world projects, and mentorship to empower developers in harnessing AI's potential.

- **AI Notebook:** Built an AI-powered student performance using Multi-models interactive Q&A enabling uploads, dynamic data visualizations, with personalized academic recommendations saving notes anchored in the central AI Knowledge Base.
- **AI Solution Builder:** Helps users design AI application architectures by guiding them through a structured workflow to select optimal techniques and generating tailored suggestions along with architecture diagrams to serve as a reference for building their applications.
- **AI Knowledge Base:** Web-based platform to document and share AI learnings, best practices, and reusable assets enabling developers to build GenAI solutions efficiently and collaboratively.

## PUBLICATIONS

**RAG HUB - A comprehensive guide to build an AI Architecture** 

- RAG HUB – A question-driven framework to simplify AI architecture design, enabling dynamic filtering and decision-tree logic to guide developers of all levels. Streamlined development, reduced learning curve, and supported scalable AI solutions.


**CNN based Curved Path Detection for Autonomous Rover** 

- Developed an autonomous rover using Raspberry Pi 3B+ and reinforcement learning for lane-following and obstacle avoidance. Integrated CNN, Pi Camera, ultrasonic sensors, and motor control for real-time navigation.


## EDUCATION


 **MSc in Artificial Intelligence**  
National Collage of Ireland, Ireland  
 2025 – 2026


## TECHNICAL SKILLS


 **Artificial Intelligence:**  
RAG, Agents, Prompt Engineering, Agent Development Kit, LangChain, llamaIndex Fine Tuning

 **Programming Languages:**  
Python, JavaScript


 **Cloud Platforms:**  
Microsoft Azure, Google Cloud Platform - GCP (Baics)


 **Data Analytics:**  
Microsoft Fabric: Power BI, Data Engineering, Data Science, Data Factory, OneLake Data Hub

 **DevOps Tools:**  
Docker, Kubernetes Services, CI/CD, Prometheus, GitHub Actions

 **Web Technologies:**  
React, Polymer, HTML, CSS, Node.js

## ACHIEVEMENTS

 **Best Paper Award (2025)**  
Awarded Best Paper at the IEEE International AI Conference selected from over 1,000 submissions

 **Innovator of the Year – Soliton**  
Recognized for introducing cutting-edge AI techniques, mentoring junior engineers, and leading transformative innovation across projects.

## CERTIFICATIONS

- Microsoft Azure
- Machine Learning
- Neural Networks and Deep Learning
- Full Stack Web Development
- AWS
- Google Professional Workspace Administrator