

- 2023
- Winner, Hack for Earth (invited to work with UNICEF); Runner-up, Amazonia Hack (Earth Hacks, Brazil); Runner-up, Code to Give (Morgan Stanley, UK); Winner, FDM Design Challenge, Glasgow; Mystery Award Winner, Climate Change Maker; Best Chinachem Group Award and Most Innovative Award, PolyHack, China.
- 2022
- Best of the Rest, Climate Change Maker (YIC, Canada); Design Your Future Award, MakeUC (University of Cincinnati); Winner, Amazonia Hack 1.0; First Position, Healthcare Ideation, MED INVADE (SMR, India).
- 2021
- Inequality Track Winner and Best Media Hack, HackDuke (Duke University); Winner, HackTCMX; Winner, BioHacks (UC Riverside); Winner, MakeMIT (MIT); Runner-up, Synaptic Hacks.
- 2020
- Best Research Paper Award, ICACCE; All India Rank 12, IEEEExtreme 14.0.
- 2019
- Best Research Paper Award, 5th ICCCS; All India Rank 26, IEEEExtreme 13.0; Merit-based scholarship (top 5 in class).

Professional Experience

- 2024–Present
- AI Engineer, Unineed Limited, Glasgow, UK
- Full-time until October 2025; part-time thereafter, alongside the PhD.
- Architected and shipped production sourcing and pricing platforms spanning 14+ marketplaces and 100+ stores, combining real-time price, stock and margin intelligence with bulk supplier processing, including parallel pricing of 1,500+ SKUs across major consumer marketplaces.
 - Built marketplace and supplier-channel automation across multiple regions, synchronising 600+ trade-in listings, automating pricing and auction bidding, and integrating supplier APIs with the company ERP for catalogue sync, signed webhooks, purchasing and monitoring.
 - Designed a cross-platform Windows/macOS Device Analyzer for warehouse intake of phones and tablets, including USB IMEI/serial capture, carrier/FMI checks, label generation and inventory synchronisation across consumer and B2B workflows.
 - Built UniSupport, a customer-service platform for Amazon and Back Market operations, managing 800+ live conversations and 300+ Care cases for an 8-person support team, with email automation, SLA tracking, translation and agent analytics.
- 2023–2024
- Full Stack Developer, Amped Digital, Glasgow, UK
- Led an AI-driven analytics platform for real-time KPI forecasting and marketing intelligence on GCP with custom ML pipelines.
 - Helped secure £50,000 UKRI funding through technical leadership, architecture, and a rapid MVP.
 - Optimised GCP workflows, improving reliability and cutting infrastructure cost by 36%.

Selected Projects

- Coire
- Offline disaster-response app with on-device AI, peer-to-peer messaging, and local resource mapping.
- iAletheia
- Privacy-first on-device macOS AI agent for local memory, screen guidance, and context-aware assistance.
- SustainEdge
- GenAI web app that estimates AI-task carbon footprints and recommends energy-efficient models.
- MimixAI
- AI market-research tool that creates human-like personas for real-time qualitative feedback.
- Magellan
- Vision and NLP travel guide that personalises tours in real time.
- SpreadRo
- Autonomous rover that seeds grass in summer and spreads ice melt in winter.

Leadership and Service

- 2023–Present
- Organizer, Google Developer Group Glasgow
- 2021–Present
- Founder, Mcurio and ClimateThread (education access and climate-tech initiatives; presently non-trading)
- 2024
- Youth STEM Changemaker, Youth STEM 2030
- 2021–2022
- Technology Lead, POWAN (website rebuild and K-12 C++ programming bootcamp)
- 2021
- Technical Lead, LetsGrowMore (Hosted a 2-month open-source programme with 5,000+ participants)
- 2021
- Content Co-Director, RadScholars; Policy for People Fellow, Harvard Innovation Labs
- 2019–2021
- Secretary, IEEE Student Branch, BTKIT (student coordinator for two international faculty development programmes)