

# Harith Ibrahim

📍 Leeds, UK    ✉ harithsami01@gmail.com    ☎ +44 7385 616247    in yourusername  
harithsami.github.io

## Machine Learning Engineer

Technically adept professional with a robust foundation in Mechatronics and Robotics, specializing in designing and optimizing machine learning systems, infrastructure, and safety evaluations. Experienced in leading multidisciplinary teams to deliver high-quality solutions. Proficient in developing modern web applications and architecting scalable ML systems, integrating ethical AI practices.

## Education

**BS    University of Leeds**, Leeds, UK, Mechatronics and Robotics Engineering (BEng and MEng), 2020 – 2025

- **Coursework:** BEng (2020 - 2024): Focused on foundational principles in robotics, electronics, and mechanical engineering. , MEng (2024 - 2025): Specialized in advanced robotics and machine learning applications.

## Experience

**UltraCell Networks**, Machine Learning Engineer Leeds, UK May 2024 – Present

- Architected and implemented scalable ML systems, optimizing server and network power efficiency, achieving a 65
- Designed network topology simulations and reinforcement learning models, improving resource allocation by 35
- Created dashboards and automated workflows for performance monitoring, enhancing decision-making across teams.
- Developed FPGA/SoC-based systems for Cellular Passive Optical Networks (C-PON), delivering a 24
- Documented architectural designs, conducting cross-team integration testing to reduce deployment errors.

**Nokia - Bell Labs**, Robotics and Communication Intern Cambridge, UK July 2023 – September 2023

- Designed reinforcement learning navigation systems for autonomous drones, enhancing performance by 40
- Partnered with cross-disciplinary teams to integrate hardware-software systems and troubleshoot errors, ensuring scalable solutions.
- Authored and presented methodologies for seamless project handovers, improving continuity and knowledge transfer.

**Electronic Arts - Criterion Games**, Technical Designer Guildford, Surrey July 2022 – July 2023

- Acted as a key liaison between the Art and Software Development teams, resolving over 170 Jira tickets within Agile sprints.
- Facilitated cross-team collaboration by aligning diverse terminologies, processes, and requirements, improving project timelines.
- Allocated compute resources for live-service multiplayer game modes in Need for Speed: Unbound, boosting system performance and user engagement.
- Authored robust technical documentation and implemented scalable debugging workflows to improve knowledge transfer and system stability.

- Integrated development best practices, ensuring alignment with high-quality engineering standards.

**University of Leeds - Digital Creativity and Cultures Hub**, Research Engineer – Digital Humanities and Preservation

Leeds, UK December 2023 – August 2024

- Developed several web applications, showcasing university archive tools using Next.js, TypeScript, and MongoDB, enhancing accessibility.
- Built automation scripts for data analysis, integrating IIIF manifests into custom database systems.
- Created scalable digital twin platforms leveraging photogrammetry and Gaussian splatting techniques to increase user engagement with historical collections.
- Designed and documented architectural workflows for digital preservation, driving user adoption and reliability.

### Skills

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Machine Learning, Robotics, Software Development, Engineering Mathematics, Embedded Systems Design, Web Application Development, System Architecture, Python, C++, TensorFlow, PyTorch, Next.js, TypeScript, MongoDB, AWS Cloud Services, ROS, Nvidia Omniverse, Gazebo, MATLAB, FPGA/SoC Development, Git, Jira, Agile Methodologies, Docker, Linux,

### Languages

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