Abeer Makin

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TECHNICAL SKILLS

Languages: Java, Python, C, Racket, SQL, JavaScript, XML, HTML

Frameworks and Libraries: Spring Boot, Node.js, OpenCV, TensorFlow, NumPy, Matplotlib, Pandas, Flask, React

Developer Tools: Git, VS Code, PyCharm, IntelliJ IDEA, Google Cloud Platform, Spark, BigQuery, AWS, DataDog

EXPERIENCE

Wipro *(May 2025 – August 2025)*   *Reading, United Kingdom*

- Designed and deployed enterprise onboarding assistant tool with **React and Typescript** frontend, leveraged by **Java Spring Boot APIs** and **PostgreSQL**, serving **1000**+ employees and reducing onboarding time by **25%**
- Led development of metric pipelines on GCP with BigQuery for asset risk analysis in the **water industry,** enabling **predictive asset** maintenance and preventing **£50K** in infrastructure failures, through leveraging **regression** models**.**
- Leveraged **LLM** chatbot using **Hugging Face** transformers on **AWS** EC2 handling **1000+** equipment maintenance queries
- Delivered business solutions managing **deliverables** across **cross-functional** teams using **Git** and integrating **CI/CD** pipelines

West Berkshire Council *(June 2023)*   *Newbury, United Kingdom*

- Optimised helpdesk and audit trail processes in **SQL** systems, improving query performance by **25%** and reducing **latency**
- Automated document processing pipelines via data extraction using XML and **JavaScript,** eliminating **10+ hours** of manual work
- Collaborated on enhancing chatbot integration, utilising **Natural Language Processing** for improved training while integrating **DataDog** monitoring for performance tracking, increasing query accuracy by **30% and** reducing response time **to <5 seconds**

Siemens *(May 2023)*   *London, United Kingdom*

- Implemented **A/B** testing framework for industrial control systems for **£100K** operations, improving feedback loop efficiency by **12%**
- Calibrated digital twin models for manufacturing equipment via real-time sensor data, achieving **85% accuracy** in maintenance
- Validated next-gen **IoT sensor** technologies through software-hardware integration testing methodologies

GeeseHacks *(January 2025)*   *Waterloo, Canada*

- Developed high-traffic web application, serving **500+** students at University of Waterloo for study space finding optimization
- Engineered an end-to-end recommendation system with **ETL pipelines**, real-time user input processing and **OOP** based **Python** algorithms, achieving **82%** satisfaction rate
- Built a responsive **React** frontend with live campus mapping and **GraphQL** API integration, supporting **1000+** queries daily

PROJECTS

AI Billing Anomaly Reporter | *FastAPI, CrewAI, Tensorflow, React*   December 2024

- Building **AI Agent** framework processing 500+ bills, achieving **90%** anomaly detection accuracy and reducing manual review **by 50%**
- Implementing ML models with **RAG**-enhanced **LLMs** for charge validation, automatically flagging **£20K** in inconsistencies
- Built end-to-end pipelines with **automated** stakeholder reporting, delivering **actionable** insights through interactive **dashboards**

Resistor Classification | *OpenCV, Tkinter, Python*   January 2024

- Engineered **real-time** resistor detection achieving **90%** accuracy with GUI interface processing live camera feed
- Implemented **computer vision pipelines** using **Canny** edge detection, **HSV** spaces, and morphological operations for robust recognition
- Developed colour band extraction with **contour** analysis, reducing misclassification errors by **30%** under **varying** lighting

EDUCATION

Bachelor of Computer Science, *University of Waterloo, Canada*   2024 - Present

A Levels (Computer Science, Further Maths, Physics): ***Reading Grammar School, United Kingdom***   2022 - 2024

GCSE (Maths, Science, Computer Science, Business, Citizenship): ***The Wren School, United Kingdom***   2019 - 2022

ADDITIONAL INFO

Skills

- Problem-Solving, Analytical Thinking, Emotional Intelligence, Multilingual (English, French, Hindi, Punjabi), Microsoft Office

Certifications

- IDEA Silver Award- Digital and Enterprise Skills. Qualified for Silver award in UKMT Math Challenge