Ahmed Ikram | Computer Science Student | Aspiring Developer

Dundee, Scotland | +44 7421 996048 | ahmedikram30@gmail.com | linkedin.com/in/ahmed-ikram-student
github.com/ahmedikram05 | ahmedikram05.github.io/Online-Portfolio

Professional Profile

Computer Science student looking for a 12-month industrial placement where I can apply and grow my skills. I have hands-on experience building full-stack applications, backend systems, and data-driven projects (using Python, Java, C/C++, SQL and many others). I enjoy turning ideas and datasets into working systems, I'm comfortable learning quickly in large real-world codebases.

Education

High School of Dundee   *Aug 2018 – June 2023*
- Achieved A in National 5 Computer Science, Maths, English, Economics and Physics.
- Achieved A in Higher Computer Science, Maths and English.
- Achieved C in Advanced Higher Computer Science

University of Dundee
BSc (Hons) Computer Science (Data Science and AI)   *Sep 2023 – Present*
- Most relevant modules:
  - Data Structures & Algorithms (Java)
  - Multi-Paradigm Programming (C/C++)
  - Data Visualisation and Analytics (Excel and Power BI)
  - Data Engineering
  - Artificial Intelligence & Machine Learning (Python)
- **Expected Graduation**: June 2028

Projects

Haggis Data Mining Project | Python, Jupyter Notebook
- **End-to-End Machine Learning**: Led a complete data science project from EDA to deployment recommendations, engineering custom features to boost model performance.
- **Advanced Modelling**: Implemented and tuned XGBoost, Random Forest, and PCA algorithms, achieving ~90% classification accuracy through rigorous hyperparameter optimisation.
- **Strategic Analysis**: Translated complex statistical findings into clear business insights, validating results with F1-scores and cross-stage correlation

StockLens Mobile App | React Native Expo
- **Full-Stack Architecture**: Built a responsive React Native Expo app from scratch, handling everything from secure user authentication to real-time data synchronisation.
- **Automated Receipt Scanning**: Engineered a smart OCR pipeline that captures, encrypts, and parses physical receipts, instantly turning messy paper trails into structured digital records.

Supermarket Sales Case Study Dashboard | Excel
- **Interactive Dashboarding:** Turned 51,000 raw sales records into a clean, navigable tool that visualizes $12.6M in revenue, making it easy to spot global trends instantly.
- **Actionable Insights:** Dug into the numbers to reveal that high discounts were actually hurting profits, highlighting exactly which products, like Furniture, needed a strategy rethink.

AI Movie Recommendation System | Python, Flask, JavaScript
- **Hybrid Recommendation Engine**: Engineered a dual-strategy system (Collaborative Filtering and Content-Based), achieving ~0.75 Hit Rate and ~0.22 Precision@10 by effectively balancing user history with movie attributes.
- **Real-Time Web Application**: Built a responsive Flask platform that delivers instant, personalised recommendations, translating complex matrix operations into an intuitive interface with interactive data visualisations.

Rental Car Management System | C++
- **Scalable Architecture:** Built a modular system using polymorphism and templates to manage complex vehicle hierarchies, ensuring robust memory safety through extensive use of smart pointers.
- **Intelligent Search Engine:** Engineered a fuzzy search algorithm using Levenshtein distance to handle user typos, integrated with a custom file persistence layer for reliable data storage.

Technical Skills

Category	Technologies
Programming Languages	Python, Java, C, C++, JavaScript, TypeScript, Bash
Web & Mobile Development	React Native Expo, Flask, HTML, CSS, Tailwind CSS, Bootstrap
Databases & APIs	SQL, MySQL, PostgreSQL, MongoDB, REST APIs
Data Science & Machine Learning	Jupyter Notebook, Power BI, Pandas, NumPy, scikit-learn, PyTorch, Matplotlib
Cloud & DevOps	AWS, Docker, Kubernetes, Git, GitHub, CI/CD, Agile
Testing & Development Tools	VS Code, pytest, JUnit, Postman
Operating Systems	Linux (Ubuntu), macOS, Windows

Work Experience

Zulus Peri Peri Grill Dundee
Front of House Worker   *June 2021 – September 2023*
- Managed orders and workflows, developing systems thinking and process optimisation.
- Trained 5+ new staff, building team leadership and knowledge transfer skills relevant to tech teams.
- Balanced multiple high-pressure tasks, strengthening problem-solving, prioritisation, and communication.

Tech Relevance*:* Built strong foundations in process optimisation, teamwork, and knowledge transfer, directly transferable to managing cloud and AI projects.

Beauly Mini Market
Retail Assistant   *September 2023 – Now*
- Resolved till and stock issues, applying logical troubleshooting similar to debugging.
- Streamlined inventory and deliveries through team collaboration, reinforcing project execution skills.
- Communicated effectively with diverse customers, mirroring requirement gathering and solution explanation in tech contexts.

Tech Relevance: Gained experience in troubleshooting, requirement gathering, and clear communication, aligning with problem-solving in technical environments.

Certifications

AWS Academy Graduate - AWS Academy Cloud Foundations   *Mar 2024*
- Hands-on experience with EC2, S3, RDS, IAM, Elastic Beanstalk.
- Deployed scalable, secure cloud infrastructure with auto-scaling and load balancing.
- Gained knowledge in cloud security, cost optimisation, and best practices.

AWS Academy Graduate - AWS Academy Machine Learning   *Feb 2025*
- Applied ML fundamentals with Amazon SageMaker.
- Delivered projects in data preprocessing, model training, and evaluation.
- Implemented ML models in real-world, cloud-hosted scenarios.

Transferable Skills

- ✓ **Collaboration & Leadership** – Team-oriented, experienced in mentoring and cross-functional collaboration.
- ✓ **Strategic Execution** – Strong planning and time management for end-to-end project delivery.
- ✓ **Technical Communication** – Translate complex concepts into clear, actionable insights.
- ✓ **Problem-Solving & Analysis** – Skilled in root cause analysis and scalable system optimization.
- ✓ **Attention to Detail** – Committed to accuracy through rigorous testing and best practices.
- ✓ **Continuous Learning & Adaptability** – Rapidly master new technologies and pivot strategies as needed.
- ✓ **Data-Driven Decision Making** – Use metrics and performance analysis to guide decisions effectively.