

Jacob Barbour

FOURTH YEAR UNDERGRADUATE

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Personal Summary

Fourth year undergraduate currently working towards a bachelor's degree in Computer Science at the University of Edinburgh. Highly motivated to learn and perform at a high level whilst simultaneously continuing my professional development. Passionate about all facets of technology and applying my skills towards practical outcomes that solve real-world problems.

Education

University of Edinburgh

Edinburgh, UK

Computer Science BSc

Sept 2020 - Present

- Undertaken a large variety of courses and have also developed important workplace skills such as: time management, clear communication, and adaptability.
- Received a strong mathematical and theoretical grounding in my first three years of study along with programming experience in various languages/technologies including: Java, Python, C, Haskell, R, and MIPS Assembly.
- **Courses and grades:**
 - Year 1
 - ★ INFR08025 Introduction to Computation – A2
 - ★ INFR08020 Cognitive Science – A2
 - ★ INFR08029 Object Orientated Programming – A1
 - ★ MATH08057 Introduction to Linear Algebra – A2
 - ★ MATH08058 Calculus and its Applications – A3
 - ★ MATH08077 Introduction to Data Science – A2
 - Year 2
 - ★ INFR08026 Introduction to Algorithms and Data Structures – A3
 - ★ INFR08027 Introduction to Computer Systems – A2
 - ★ INFR08030 Foundations of Data Science – A3
 - ★ INFR08031 Discrete Mathematics and Probability – A2
 - ★ INFR08032 Software Engineering and Professional Practice – A3
 - ★ PHYS08050 Introductory Astrophysics – A2
 - Year 3
 - ★ INFR09051 Informatics Large Practical – A2
 - ★ INFR10057 Software Testing - A3
 - ★ INFR10074 Computer Communications and Networks – A2
 - ★ INFR10022 Professional Issues – A3
 - ★ INFR10067 Computer Security - A1
 - ★ INFR10064 Software Design and Modelling - A2
 - Year 4 (in progress)
 - ★ INFR10044 - Honours Project (Informatics) - TBC
 - ★ INFR10076 - Computer Architecture and Design - A1
 - ★ INFR11238 - Blockchains and Distributed Ledgers - A2
 - ★ INFR11088 - Extreme Computing - A2
 - ★ INFR10079 - Operating Systems - TBC
 - ★ INFR11219 - Parallel Programming Languages and Systems - TBC
 - ★ INFR11249 - Applied Cloud Programming - TBC
- Individual course information can be found at:
 - ★ <http://www.drps.ed.ac.uk/>

Robert Gordon's College

Aberdeen, UK

2014-2020

- **SQA Higher grades:**
 - Mathematics - A
 - English - A
 - Physics - A
 - Computing Science - A
 - Business - A
- **SQA Advanced Higher grades:**
 - Mathematics - A
 - Physics - A
 - Computing Science - A
- In my final year, I received the Basil S. McLellan prize for Mathematics alongside the third prize in Physics for my performance in both subjects.
- Received my Duke of Edinburgh Bronze award, which gave me invaluable experience and greatly improved my self-motivation in carrying out a large commitment.

Work Experience

JP Morgan Chase & Co.

Glasgow, UK

SEP Summer Analyst

June 2023 - August 2023

- Worked within a public cloud team responsible for managing self-service infrastructure leveraging a combination of Amazon Web Services and HashiCorp Terraform.
- Built a cloud-native application to improve visibility for an internal release process, taking the project from end-to-end. Primarily worked on the backend implementing an ETL (extract, transform, load) workload in Java utilizing the Spring Framework. In order to ensure a performant solution, I learnt how to use Spring WebFlux along with reactive programming best practices to optimise the handling/processing of API interactions.
- Gained experience using Jenkins to implement a CI/CD pipeline to automate testing, container image building, and subsequent deployment of the application to an AWS ECS cluster via Terraform.

Freelance

Edinburgh, UK

Higher Mathematics Tutor

January 2022 - May 2022

- Successfully tutored a Scottish secondary student from a C grade in their preliminary exam to an A grade in their final SQA examination.
- Bolstered my ability to clearly transfer my understanding of a subject to others whilst adapting to their learning style and pace.

J Sainsbury

Aberdeen, UK

Trading Assistant

July 2021 - Sept 2021

- Worked with a small team in a J Sainsbury convenience store where I gained greater experience in managing responsibility such as helping to empty the tills and ensuring no restricted products were sold to underage customers.

University of Aberdeen IT Services

Aberdeen, UK

Work Experience

June 2019

- Experienced multiple different departments including: Academic Applications working in full stack development, Corporate Systems working with Oracle SQL, the IT help desk offering support to end users, and the Web Team working in web development.
- Garnered real world experience with the Agile methodology and its components such as user stories, sprints, and daily scrum meetings.

Barnardo's Charity Shop

Aberdeen, UK

Volunteer

Oct 2017 - Jan 2018

- Commended for my task-prioritisation, organisation, and work ethic by the store manager.
- Adapted my communication skills on the fly to understand and resolve customer queries.

Certifications

Amazon Web Services Certified Cloud Practitioner - Issued 28th July, 2023
HashiCorp Terraform Associate (003) - Issued 21st August, 2023