Gregor Soutar

Personal Information

Name: Gregor Soutar
Mobile: 07536 041401
Email: gregor@gscs.uk

Website: https://www.gscs.uk
LinkedIn: https://www.linkedin.com/in/gregorsoutar/

Personal Statement

Dedicated computer science student, skilled in teamwork and leadership with a solid foundation in mathematics, logic, and a broad range of programming languages. Determined to innovate and excel, leveraging past experience from university and the workplace.

Experience and Employment

Internship June 2021 – July 2021
Academic Registry – University of St Andrews

I was employed by registry to create a tool to automate a number of their data management processes.

- I utilised machine learning to produce a flexible way to detect fuzzy duplicates across two delimited datasets and within a single dataset, gaining experience in the training and deployment of machine learning models.
- Implemented an auto-link checker that concurrently determines whether or not links are valid.
- Created a 'difference detector' to detect differences between datasets that share the same primary keys.
- Took initiative and developed an accessible, user-friendly user interface.
- Gave an informative final presentation to forty-eight members of Registry staff. (link to presentation)

The Python tool I created is now used by registry, saving time, reducing errors, and improving the overall quality of their data.

Crew Member October 2018 – Present
McDonalds

Over my three years at McDonalds, I have learned and reinforced a number of transferable values and skills.

- An appreciation for critical systems that must work flawlessly with minimal down time.
- A newfound understanding of human-computer interaction and how it can be improved.
- The ability to do multiple jobs simultaneously whilst maintaining composure and precision under pressure.

My ongoing employment there continues to feed into my work in computer science. It has made me a better communicator, team member and has underlined the importance of good system design.

Programming languages and Tools

- Java
- C
- Python
- Haskell
- JavaScript
- Visual Basic
- MATLAB
- Prolog
- Tableau (Current Semester)
- GWT (Current Semester)
- SQL (Current Semester)

Projects and Interests

- Designed and built my own home alarm using a collection of Wi-Fi-enabled microcontrollers. One device acts as a hub, sending push notifications when a sensor's state changes and communicating with another device that indicates which sensor has been triggered by displaying a set colour.
- Interested in potential applications for machine learning in healthcare, from image analysis to bio-sensing, with potential for faster diagnoses and improved health.
- Interested in research and development, using my skills in computer science to produce resources that help to improve the lives of others.

Education

University of St Andrews (Marks out of 20) September 2018 – June 2023

Year 4:
Computer Security (18.9) · Constraint Programming (17.9) · Signal Processing: Sound, Image, Video (18.8) · Software Engineering Principles (17.7) · Databases (TBC) · Distributed Systems (TBC) · Information Visualisation (TBC) · Video Games (TBC).

Year 3:
Artificial Intelligence (18.2) · Data Encoding (15.1) · Logic and Reasoning (17.3) · Computational Complexity (16.0) · Data Communications and Networks (16.9) · Human Computer Interaction (18.8) · Software Engineering Team Project (16.7).

Year 2:
Foundations of Computation (16.8) · The Internet and the Web (17.2) · Advanced Programming Projects (18.5) · Computer Systems (17.6).

Year 1:
Programming Projects (19.0) · Programming with Data (16.5) · Mathematics (14.0) · Introductory Mathematics (7.0) · Object Orientated Programming (12.2) · Physics 1A (13.8).

Glenrothes High School August 2012 – April 2018

Advanced Highers:
Computing Science (B) · Mathematics (C) · Physics (B) · Music (A).

Highers:
Computing Science (A) · Mathematics (A) · Physics (A) · Music (A) · English (B).

National 5:
Computing Science (A) · Mathematics (A) · Physics (B) · Music (A) · English (A) · Graphic Communication (A).

Achievements

- Admitted to Dean's List for Sessions 2019-2020 and 2020-2021 - Credit-weighted mean for the years were 16.5/20 or above, intended to honour high intellectual achievement across an entire year.
- Dux of School – I was recognised as the most academic and accomplished pupil of my year group.
- School Captain (Head Boy) – It was my responsibility to represent the views of students, manage pupil-lead teams, chair meetings and attend events.

References

References available upon request.