Robert Kerr - Curriculum Vitae

Profile

I am a very enthusiastic and knowledgeable individual who takes pride in their ability to lead, work and collaborate in a team. I am a confident person, and I can always be relied upon to complete a task with efficiency, effectiveness, and punctuality.

I always take a creative and inclusive approach to solving problems, and with my competence in mathematics, physics, and computing, I can complete very complex tasks. I challenge myself every day at university, and I love using my knowledge and learning mindset to work in a team to overcome these challenges.

Key Skills

- Expert in algorithmic programming in Python, MATLAB, Java, Mathematica.
- Analysis of physical systems and design of mathematical models.
- Leadership, team and change management.

Education

09/2018 – 06/2023: MPhys Mathematics and Theoretical Physics, 3^{rd} year, University of St Andrews

- Running first class grades: Quantum mechanics 16.7/20.0, Lagrangian and Hamiltonian dynamics 16.7/20.0, Computational physics 16.9/20.0, Abstract Algebra 17/20, Mathematics for Physicists 19.2/20.0 (St Andrews GPA).
- Thorough knowledge and use of MS Office, namely Excel for laboratory data collection.

08/2012 - 06/2018: Dalziel High School, Motherwell, Scotland

- Advanced Highers (AAA): Maths, Physics and Chemistry, Highers (AAAAAA) including Maths and English.

Work Experience

05/2021 - 08/2021: Systems Engineering Summer Placement, Leonardo MW Ltd (Digital Radar, Edinburgh)

- Developed and implemented algorithms for radar modelling software.
- Coordinated with other divisions to ensure adequate testing of software and systems.
- Organised student catch-up session and acted as liaison between interns and management.

10/2020 - 05/2021: Contact Tracer, NHS National Services Scotland.

02/2018 - 07/2018: Customer Assistant, Vue Cinemas.

Leadership and Positions of Responsibility

04/2020 - Present: Captain, St Andrews University Sub Aqua Club (SAUSAC)

- Lead a large committee, plan diving and training events and coordinate logistics.
- Ensured the club has adapted to the impacts of COVID-19, by implementing safe new training methods, a thorough equipment hygiene system, and online alternatives to diving, such as organising marine recording courses.

10/2018 - 08/2020: Officer Cadet, East of Scotland Universities Air Squadron (ESUAS)

- Intense flight training and infantry commanding, and involved in public speaking and squadron debates.
- Represented the RAF as a Military Service Steward at Wimbledon.

Awards, Licences and Certifications

- Dean's List Univ. of St Andrews: 2019, 20 & 21.
- Arkwright Scholarship: 2016.
- British Education Award: 2017.

- School Vice-Captain (Dalziel High School): 2017-18.
- Full UK Driver's Licence: 2017.
- BSAC Sports Diver and Assistant Diving Instructor: 2020.

Hobbies and Extra-Curricular Interests

- A love for the outdoors and have a passion for diving, snorkelling, and hiking.
- Enjoy programming in my spare time and have Further experience in Java, Arduino, Raspberry Pi and 上下入.