

Alexander John Toop

Profile

Competent, enthusiastic and approachable: I am a driven individual, keen to make a positive contribution to any situation. My passion to move forward and achieve results means that I often think out of the box, to innovate and take the best path forward.

Achievements and Key Skills

Teamwork	My role in the Aberystwyth University Staff Student Consultative Committee involved me in periodic meetings, peer interactions and official discussions to improve aspects of my course. This has helped me resolve complex issues as a member of a team.
Programming	I have experience programming in; Visual Basic, C, Haskell, Java and JavaScript . I am also confident with the software development life cycle and have applied this in commercial situations.
Problem Solving	Experience studying Mathematics and Computing has given me an efficient and effective attitude to creating problem solutions. I am competent at looking methodically through situations and resolving them using my experience and logic .
Responsibility	Being President of the University Karate Club has involved many responsibilities such as; documentation, organisation and decision making . Teaching at the club has also resulted in me developing skills in planning and communicating to large groups.

Personal Projects

Xcode iOS App Development

Currently developing an iOS application designed to act as an anonymised local area posting board.

Website Development

Have developed from scratch my own personal website to act as an online portfolio and blogging spot. Reference: alexandertoop.com

Arduino Development

Have experience placing my Arduino into different hardware configurations and programming it to interact directly with hardware such as serial clock circuits.

Server Maintenance and Access

Maintained and configured Linux and Red Hat operating systems remotely for personal projects such as hosting websites and VOIP clients.

Education and Qualifications

2015 - Present: Studying Software Engineering BEng at Aberystwyth University. (With Integrated Industrial Year.) Relevant Modules:

Introduction to Programming: **Result 76%**

Taught: C with elements of C++, defensive procedural programming theory, use of Arduinos, testing and the enhancement of programs.

Introduction to Computer Hardware, Operating Systems and UNIX Tools: **Result 86%**

Taught: UNIX operating systems, graphical and command line interfaces, bash scripting, advanced searching and LaTeX.

Web Development Tools: **Result 81%**

Taught: Web design concepts, HTML5 and CSS3. Good standards were enforced and put into practise.

*Programming Using an Object-Oriented Language: **Result 75%***

Taught: Use of the object-oriented paradigm, Java programming language and the use of Unified Modelling Language.

*Programs and Solutions: **Result 86%***

Taught: Analysis of algorithms, searching and sorting, matrix operations, recursion and computability.

2013 - 2015: Attended Hereford Sixth Form College. Achieved BBBD at A-Level in Mathematics, Computing, General Studies and Physics respectively. Relevant A-Levels:

*Mathematics A-Level: **Grade B***

Provided me with key skills that have made me good at breaking down problems and deducing ways to solve them.

*Computing A-Level: **Grade B***

The Computing course introduced me to both the practical and the theoretical aspects of programming.

2008 - 2013: Achieved Distinction, 6 A's and 4 B's at GCSE. Including Maths and English.

Previous Employment and Work Experience

Summer 2015: (Full-Time) Medical Cell Administration Assistant

Dawson Medical Ltd. – Employer: Dave Howell

I was **responsible** for organising and cataloguing thousands of medical samples. I worked **independently** to develop a system for the identification and location of catalogued samples with automatic identification of samples for disposal. My responsibilities subsequently included **training** key members of the medical team to use my system. This taught me to take ownership and responsibility for my work.

July 2014: (2 Weeks Work Experience) BEACON Bio-Refining Project

Institute of Biological Environmental and Rural Sciences – Manager: John Norris

Maintained Linux servers, helped **troubleshoot** errors and assisted in creating a website view of employee data using HTML and Ruby. Communication was paramount with BEACON staff members to determine software requirements and designing solutions to fit within current system.

Hobbies and Interests

I enjoy developing new skills, participating in teamwork orientated sports and long distance running. I also practise Shotokan Karate in my spare time at both the University and town club, helping teach both children and adults whilst developing my own skills.

References

Nigel William Hardy (Personal Tutor)

Aberystwyth University,
Llandinum Building, Penglais,
Aberystwyth, Dyfed SY23 3DB
nwh@aber.ac.uk

Dave Howell (Operations Director)

Dawson Medical Ltd.
Henfaes Lane, Welshpool,
Powys, SY21 7BE
+44 (0)1938 551700