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 outside of the box, to innovate and take the best path forward.

Key Skills

Languages	Proficient using: **C, C++, SQL, Visual Basic, Haskell, Java** and **JavaScript**. ~*Degree and personal projects*.
Responsibility	Experience with: **decision making**, **organisation** and **documentation**. ~*Presidency of University Karate Club*.
Communication	Confidence: **team working, communicating to large groups** and **balancing judgements**. ~*University Staff Student Consultative Committee*.
Problem Solving	I have a **methodical**, **logical** and **thorough** approach to tasks and take pride in completing them to my **best standard**. ~*Education*.
Development	I have applied the **software development life cycle** in commercial environments. ~*Work experience*.

Personal Projects

Xcode iOS App Development
- Developing an iOS Application that interacts with a server to receive and send private messages and posts. Swift programming language used, server communications using TCP.

Website Development
- Have developed my own personal website to act as an online portfolio and blogging spot. Using good HTML standards and CSS. Reference: alexandertoop.com

Arduino Development
- Have experience programming my Arduino to interact with different hardware configurations utilising hardware such as trickle charging clock chips and referencing their core libraries.

Server Maintenance and Access
- Maintained and configured operating systems such as Ubuntu and CentOS remotely for personal projects such as hosting websites and providing remote access to files.

Education and Qualifications

2015 - Present: Software Engineering BEng at Aberystwyth University.
Relevant Modules:

***Introduction to Programming*: Result 76%**
- 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%**
- UNIX operating systems, graphical and command line interfaces, bash scripting, advanced searching and LaTeX.

***Programming Using an Object-Oriented Language*: Result 75%**
- Use of the object-oriented paradigm, Java programming language and the use of Unified Modelling Language.

***Programs and Solutions*: Result 86%**
- Analysis of algorithms, searching and sorting, matrix operations, recursion and computability.

2013 - 2015: 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 confident at breaking down problems and deducing ways to solve them.

Computing *A-Level*: Grade B
- Introduced me to both the practical and the theoretical aspects of programming using a procedural programming language.

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.

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. As president of the University Karate club, I practise 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