#### Andrew K.M. Miller

PERSONAL Stoneleigh Mobile: 07729 514174 DETAILS New Road E-mail: akm207@ic.ac.uk North Nibley Nationality: British

Dursley

Gloucestershire, GL11 6DR

EDUCATION Imperial College London

MEng, Information Systems Engineering Sept 2007 - July 2011

Degree Class: 2.1

Bristol Grammar School

A Levels Sept 2000 - Aug 2007

Two A's (Mathematics and Physics)

Two B's (Further Mathematics and Computing)

Work Experience

### Engineering Experience

Undergraduate Researcher at Imperial College London

Summer 2009

2-3 months working with PhDs in the Imperial College EEE Robotics Lab, starting a project on an autonomous remote control helicopter

Shadower at Renishaw plc

**July 2005** 

One week's work experience on assembly line for Printed Circuit Boards (PCBs)

# Other Experience

Part-Time Retail Assistant at Cotswold Outdoor Ltd. Aug 2010 - Present

Involves selling customers various items that would be used in outdoor pursuits, such as clothing, boots and rucksacks and providing knowledge to help customers make the best choice of equipment.

Tour Guide at Imperial College London

June 2008 - June 2011

Showing prospective students & their parents around campus throughout the year

Park Worker at Cattle Country Adventure Park Aug 2007 - Sept 2008

Supervising various areas of the park where children need supervision to use the equipment and dealing with any problems that customer's might have.

Waiter at Nibley House Catering

May 2003 - Aug 2007

Catering for private function and wedding receptions

Mentor for Digitall London

Oct 2009 - Nov 2009

Volunteered on a project to bridge the digital age gap between old and young by teaching weekly on a one-to-one basis

## Engineering Projects

# Individual Projects

 $1^{st}$  year project on parallel image processing using an RC100 FPGA board, developed hardware that created concurrent pointers on a live video stream.

Developed a Pascal to ARM assembler compiler in C++ using Lex/YACC

Continuously developing C++ code for an autonomous mutli-rotor drone including the use of Boost threads and writing a USB driver for the Linux OS. Has now expanded to use an Arduino microcontroller for on-board stabilisation and passing data wirelessly to a laptop.

### Group Projects

Research project into Terahertz Technologies

Produced a web game in a group using agile development techniques

Large group project focusing on the langage evolution and leadership of independent agents within the setting of 2 player binary games, primarily the game of chicken.

Group Project developing a robot that conducts surveys with the focus on Human-Robot Interaction

TECHNICAL SKILLS Programming: C, C++, Java, Pascal, Python, BASH shell scripting, GNU make, SQL, VCS (SVN), ARM assembler, VHDL, UML, PHP, HTML, CSS, AJAX and JavaScript specifically the Google Maps API.

Embedded Systems: Software and hardware development with Texas DSP and Altera FPGA platforms

Computer Applications: TeX (IATeX, BibTeX), Office Suites, MATLAB, Modelsim, Synplify, Quartus II and some experience in Photoshop

Operating Systems: Microsoft Windows family, Linux (OpenSUSE and Ubuntu)

Other Skills Clean driving l

Clean driving license since September 2007

Working and organizing a team in Group Projects such as Duke of Edinburgh Award and at Cotswold Outdoor

Leadership skills through volunteering at local Scout Group & Group Projects during my degree

Teamwork and Communication skills gain through Group Projects and Tour Guiding for my University

Hobbies and Interests Completed my Duke of Edinburgh Bronze and Silver Award and I am currently working through my Gold Award

Enjoy outdoor pursuits such as rock climbing and skiing

Achieved clarinet grade 5

Interested in Photography and remote control helicopters/Unmanned Aerial Vehicles.

References

Dr. J.V. Pitt (Personal Tutor) Email: j.pitt@imperial.ac.uk Tel No: 0207 594 6318

Dr. Y. Demiris (Supervisor for Final Year Project)

Email: y.demiris@imperial.ac.uk

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