

Theo Windebank

Last Updated on 10th February 2016

theowindebank.co.uk
theo.windebank@stcatz.ox.ac.uk | 07849199189

EDUCATION

UNIVERSITY OF OXFORD

MEng | Engineering Science

St. Catherine's College (2013 - 2017)

Current Modules:

- Engineering Computation
- Information Engineering Systems
- Control Systems
- Software Engineering
- Biomechanics
- Biomedical Modelling and Monitoring

Predicted: 2.i

QUEEN ELIZABETH HIGH SCHOOL

Hexham (2008 - 2013)

- A* Maths
- A* Further Maths
- A* Physics
- A Product Design
- A Extended Project

PROJECTS

COURSEWORK

Saving Oneself *current*

- Looking at imaging and processing the human brain to map the 'connectome'.

Android Development

- Coded a calculator in Java.

Mobile Robots

- Programmed microcontrollers in C to make a robot dynamically follow a course.

Mechanical CAD

PERSONAL

Raspberry Pi Cocktail Dispenser *current*

- Built and programmed a web interface to remotely dispense cocktails.

OTHER

Engineers Without Borders *current*

- Working on a database system to collect and process information on malaria cases in rural Peru.

EXPERIENCE

NEWCASTLE UNIVERSITY

| Research Assistant for Communications, Sensors, Signal & Information Processing Group

July 2015 - Sep 2015 | Newcastle upon Tyne, UK

- Worked on various sonar systems to image undersea objects beneath sand.
- Explored a variety of techniques such as delay-sum beamforming, synthetic aperture focusing and signal filtering.

SKALENE | Modelling & Analysis Technician

July 2014 - April 2015 | Cambridge, UK

- Worked on a cheap and compact PCR (Polymerase Chain Reaction) unit used to amplify DNA.
- Simulated and analysed heat flow between parts of the PCR in order to maintain a uniform heat distribution.
- Improved data analysis skill set.
- Gained experience with FEM modules of SolidWorks.

ROYAL AIR FORCE | Officer Cadet

Oct 2013 - June 2014 | Oxford University Air Squadron, Oxford, UK

- Tutored to fly the Grob G 115 totalling 4hrs flight time.
- Challenged continually with intense solo and team based activities.
- Light physical and weapons training.

5PORE | Web Developer / Graphic Designer / Artist

Sept 2010 - March 2015

- Designed, developed and maintained a website showing and selling personal work.
- Ranges from skateboards to fully featured websites.
- Involved regular interaction with clients located worldwide.

THE GOLDEN LION | Bar Staff

July 2014 - Oct 2014 | Corbridge, UK

- Served food and drink, often in high pressure circumstances.
- Responsibilities included general bar maintenance and managing guest accommodation.

SKILLS

PROGRAMMING/SOFTWARE

Advanced: Matlab • PHP • jQuery • \LaTeX • MySQLi • Shell • HTML • CSS

Office Suite • Photoshop

Intermediate: Git • JavaScript

Basic: Python • Java • C

home address: Calder Cottage, St. Helen's Lane, Corbridge, Northumberland, NE455JD

term address: St. Catherine's College, Manor Rd., Oxford, OX13UJ