# EDWARD MORTIMER

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#### **EDUCATION**

## University of Texas Austin

2016 Fall - 2017 Spring

Mechanical Engineering (Study year abroad - Junior)

Fall GPA: 3.4

Academic year GPA: 3.2

(I spent a lot of time travelling in second semester, taking advantage of the little time I had left)

University of Glasgow

2014 Fall - 2017 Current

Studying: Masters in Mechanical Engineering (MEng)

Current GPA: 17.83/22

## George Watson's College

2000 - 2014 Fall

Advanced Highers; Physics, Maths, Graphic Communication

Highers: - Maths A, Physics A, Chemistry A, Graphic Communication A, Spanish A

#### **SKILLS**

Turbine Design

Member of JetX - turbine design of a low-bypass military turbofan

Robotics

Arduino and member of the University of Glasgow Robotics Team

FEA, CFD and CAD software Abaqus, ANSYS, Solidworks, Vectorworks

Computer Languages MATLAB, Java, C++, C, Arduino

**Databases** MongoDB

Other Software LaTeX, Excel and SPICE

Leadership Leader of Masters Design Project, Founder/Treasurer of food society

Languages Fluent Spanish, Basic French

#### Robotics

In terms of robotics I am currently leading a team that has entered the UKSEDS Lunar Rover competition (http://robotics.ukseds.org/); having passed preliminary design reviews the construction, programming of microcontrollers and circuit design are currently underway.

#### Arduino & RobotC

Proficient in Arduino, in the process of creating a wireless sensor reader to monitor brewing temperature from an Arduino-digital thermometer setup. Future development will be server-side and programmed in NodeJS and stored using MongoDB.

Used RobotC (A variant of C for lego microcontrollers) to interpret sensor data, and subsequently decide appropriate movement and path planning to compete against others in a "Robot wars" style competition.

#### Java

Proficient in Java, having used it to create a 2D adventure game with its own engine, which involved designing a MVC type system where the data was stored in JSON files and parsed as necessary for information (allowing for future developers to modify data), an interface which controlled for user interaction and creating a renderer (to display game objects and visuals). Also creating developement tools as seperate applications to create and store the necessary data in a database without possibility of deleting or compromising it, and cutting developement time drastically.

#### $\mathbf{Jet X}$

I am involved with JetX (https://www.jet-x.org/), a jet engine design society sponsored by **Rolls-Royce** where I aid in the design of a contra-flow turbine for a low bypass military engine. Working as part of a small team, I have am responsible for the majority of the design; this includes comprehensive turbomachinery principles, extensive MATLAB implementation, design in CAD and further refinement using FEA and CFD.

## ACADEMIC ACHIEVEMENTS

#### **Deans List**

· On the Dean's list at University of Glasgow for excellence in engineering

# **Highschool Academic Awards**

· Four academic prizes granted by the high school for best mark in the year in Art (GCSE) and Graphics (Intermediate 2, Higher and Advanced Higher)

#### **EXPERIENCE**

Volunteering 2015-2016 Glasgow

- · I volunteered part time at Shelter charity shop. My responsibilities include: Operating till, pricing items, cashing up, sorting stock, finance monthly earnings.
- · I volunteered at Nightline with University of Glasgow.

# Hardware Dismantling

2014 Glasgow

· Dismantled high performance computer hardware for an accounting firm in Glasgow.

## Freelance design

2014 Glasgow

· Did freelance graphic design for Novello music publishers (based in London).

## Design Agency

2013 Edinburgh

· Worked at Project: a logo design agency. This allowed me to make use of my creativity, helping designers there and allowing my own ideas to be part of something much greater.

#### SQA (Scottish Qualification Authority)

2013 Dalkeith

· I worked at the SQA, working a variety of different jobs, mastering office software and forming valuable connections with colleagues

#### Manning Stall

2000 - 2014 Bogota, Colombia

· I have had plenty of work experience whilst working in South America; every year I go there and I have manned stalls that sell refreshments. It has allowed me to interact and socialise with people from many different backgrounds, improving my confidence and making me approachable and easy to talk to.

#### INTERESTS

**Computer Construction -** Constructed my own performance computer and sourced parts, to use for 3D modelling and engineering modelling.

**Basketball -** Played basketball for the city of Edinburgh, a highly competitive yet fun environment where we worked together

**Brewing and Food -** I Like to brew my own Kombucha and also love to cook, especially exotic and spicy food