Martin**Siddons**

Computer Science Student

Contact

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TJEEPOT.github.io
MSiddons

Languages

Java
Python
C++
C
ARM Assembly
FPGAs

Web Solutions

HTML5 / CSS3
Flask Framework
Bootstrap

SDLC

Agile Development
OOP Concepts
OO Development
Systems Analysis
UML
Class / ER Diagrams

Undergraduate CS student graduating in 2021. Knowledge of Java, Python, C++ and C programming, and working towards projects in Time-Series Classification, Artificial Intelligence, Machine Learning, Cybersecurity and Secure Software Development in 2020/21.

Education

2017-2021 **BSc in Computer Science - Expected First Class** Norwich, United Kingdom
University of East Anglia

First year notable projects include:

- 'Web Design with Python' – *93/100*. This was a pairs project where we were tasked with designing and demonstrating an interactive site which utilises HTML5, CSS3 and JavaScript, with a Python backend utilising the Flask microframework. I wrote the server interaction and HTML for half the pages, as well as snippets of JavaScript to perform advanced features where my partner designed the other pages, login system and CSS.
- 'Bookshop Database System' – *94/100*. This project required me to interpret the client's requirements without the ability to question further, then write SQL statements via pgAdmin3 (PostgreSQL) to perform complex operations on a undisclosed set of data. Finally, I designed a series of web pages with a Python web server utilising Flask and Psycopg2 to handle these statements in a user-friendly way. Advanced DBMS features that I used include view, index and trigger, which called a PL/pgSQL function on certain inserts.

Second year notable projects include:

- 'Digital Electronic Traffic Light System' - *96/100*. This was a two person project to design and demonstrate a traffic light system driven by Mealy Machines, planned with and Truth Tables, simplified with Karnaugh Maps and assembled from discrete logic components loaded on an FPGA. We utilised a plug-in board containing lights and switches to simulate the crossing lights and car sensors and a 7-seg to display the timer and cars waiting.
- 'Feature Vector Calculator' - *65/100*. This was a project that tested my knowledge of data structures and algorithms by having me take an informal description of an algorithm, describe it in pseudocode, assess the runtime complexity of that solution, implement the algorithm in Java then run timing experiments and report the findings.
- 'Java Card Game' - *97/100*. This was a Java implementation of the card game known as cheat. I had to first implement classes to handle cards, hands and the deck, then I had to write classes that defined how different strategies would be played by the computer. One strategy had to be implemented from scratch with no hints, and my implementation of that strategy was successful in playing 15,000+ rounds against itself in a single game.

- 'Event Booking System' - *83/100*. This was a group project to design a significant piece of software from scratch using Agile and Object Orientated Development methodologies. The program allows an events management company to keep track of events they have planned as well as add and remove events, locations and customers from an internal database.

  Projects for the third year will include:
- 'Contributing to the TSML Open Source Java Toolkit' - *Capstone Project*
- 'Solve the 8-Tile Problem' and 'Develop a Chat Bot'- *Artificial Intelligence*
- 'Cybersecurity Incident Presentation' and 'Report on Cybersecurity' - *Introduction to Cybersecurity*
- Two practical *Machine Learning* projects
- Two practical projects on *Developing Secure Software*

  First Class Grade expected - year one grade 84.59 - year two grade 78.57
  Further information and more projects can be found at TJEEPOT.github.io

Professional Experience

2011-2017 **Assistant Housing Officer** Rochford, Essex
Sanctuary Housing Services Limited

- Responcible for contact between the company and customers or stakeholders following their initial contact with Customer Services. This ranged from chasing colleagues for information to feed back, to meeting with customers and discussing issues before working out a plan of action and following it through.
- Assisted colleagues in sharing tasks or covering absence to ensure our KPIs were on target, especially concerning Anti-Social Behaviour (ASB) and Lettings. This required technical skills to navigate of our database, and operation of our Noise Monitoring Equipment in order to secure court evictions for ASB.
- Ensured the company's estates were kept in good condition through regular inspections and feeding reports and recommendations to our maintenance department on where things could be improved.

Passion Projects

2019-20 Personal project site github.com//TJEEPOT/TJEEPOT.github.io/