

## Education

<b>University:</b>	2015-2019 [Result Pending] <b>Lancaster University: Computer Science (with Industrial Experience)</b> MSci Hons (IET Accredited) - First class achieved in first year and predicted for first class in overall degree.		
<b>Course Modules:</b>	<b>First year:</b> <ul style="list-style-type: none"><li>• Information Systems – 83%</li><li>• Software Development – 95%</li><li>• Digital Systems – 81%</li><li>• Statistics – 78%</li><li>• Probability – 80%</li><li>• Calculus – 69%</li><li>• Integration – 74%</li></ul>	<b>Second year:</b> <ul style="list-style-type: none"><li>• Databases – 78%</li><li>• Computer Networks – 91%</li><li>• Software Design – 72%</li><li>• Operating Systems – 86%</li><li>• Advanced Programming – 80%</li><li>• Second Year Group Project – 87%</li></ul>	<b>Third year:</b> <ul style="list-style-type: none"><li>• Internet Applications – 72%</li><li>• Distributed Systems – 70%</li><li>• Languages and Compilation – 98.2%</li><li>• Artificial Intelligence – 78%</li><li>• Media Coding &amp; Processing – 90%</li><li>• Third Year Project – 80%</li></ul>
		<b>Fourth year:</b> <ul style="list-style-type: none"><li>• Research Methods</li><li>• Distributed Systems</li><li>• HCI</li><li>• Data Mining</li><li>• Fourth Year Project</li></ul>	

## Projects

### Development of Mesh Networking Protocol for BBC Micro:bit:

- **Resource & Time Management:** Design and implementation of a networking protocol under a strict 20 week deadline.
- **Fast Learning:** Learning to use Micro:bit C library interface, low-level ARM micro-controllers, building .hex files to run on the Micro:bit etc. under time limitations.
- **Testing Embedded Systems:** My work required thorough blackbox testing of the developed mesh networking protocol with generation of a variety of creative and exhaustive test scenarios informed by a problem solving process to find root causes of bugs.

### Group Project Creation, Design & Implementation of a Java Game:

- **Collaborative Problem Solving:** Communication, discussion, and reaching of group consensus to solve design, implementation and testing challenges relating to top-down 2D car shooting game.
- **Object Orientated Design:** Use of a complex class hierarchy was required for developing a complex game with ease. Class tree represented various types of enemies, vehicles, add-on weapons and AI's.
- **Game Design:** Designed various game modes and systems including: Enemy AI, physics engine, enemy coordination, player weapons, loot system and more.
- **Communication & Project Management:** Ensuring team members are aware of dependencies and deadlines on workflow. Regularly logging progress on development of gameplay systems, required work for feature inclusions and creation of contingency plans.

**Qualifications:** A-level's: 4 A-levels including: Computer Science (A), Mathematics (A), Physics (B)  
GCSE's: 10 GCSE's grade A-C including Mathematics (A)

## Skills

- **Programming Languages/Frameworks:** Visual Basic, Java, SQL, Erlang, Python, R, CSS, HTML, PHP, CakePHP
- **High Computer Literacy With:** Word, Excel, Publisher, Netbeans, Visual Studio, Notepad++
- **System Design & Evaluation:** Designed systems for several pieces of coursework. In addition designed and evaluated a system through means of participant feedback in a self-designed experiments.

## Work Experience

Jan 2018- June 2019                      Yordas Group                      Software Developer Intern

A web development project using CakePHP to develop an internal social network for company use

- **CakePHP:** The PHP Framework used to develop the social media application
- **LAMP Stack:** Gained experience in the LAMP software stack
- **Front & Back End Development:** Full need-finding, design, implementation, testing and evaluation of a web application
- **Amazon AWS Services:** Application fully deployed with HTTPS through Amazon AWS Lightsail, routing through Amazon Route53 name servers
- **HTML, CSS, JavaScript, PHP:** Extensive use of languages used in web development
- **Requirement Prioritisation:** Taking a large list of requirements and prioritising them based on end-user needs

2013-2014                                      Carr Hill High School                      Maths Teaching Assistant

Job responsibilities & accompanying skills consisted of:

- **Effective Communication:** Explaining intricate A-level and below math concepts to students in a clear and concise manner
- **Note-taking & Attention to Detail:** Reporting overall student reception of learned concepts, including identification of weaknesses in understanding
- **Relaying of Information:** Delivering messages between departments
- **Organisation:** Collecting and storing student work, among writing down missing work.
- **Job Commitment & Resilience:** Undertaking additional optional work for absent tutors when required.