Toby Towler

Computer System Engineer

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About

Top-performing Computer Science student at UEA with practical projects in embedded systems and hardware. Achieved top marks whilst working part time. Predicted a First Class Honors, and am aiming to leverage strong academic achievements, practical project experience, to excel as a software engineer.

Education

University of East Anglia, Computer systems engineering BEng – Norwich   Sept 2022 - June 2025

- Achieved 73% in my second and third years
- Achieved 85% in electronics showcasing my low level hardware knowledge
- Achieved 80% in Embedded Systems showcasing knowledege of C/C++/FPGA

Projects

TType   C++

- High perforamnce terminal based typing speed game
- Used common C++ APIs for terminal rendering such as NCurses
- Build files written in CMake to pull in dependancies

Drunk Detector Android App   Java, Android, Python

- Native Android app with Android Auto integration
- Onnx model to detect drunkenness from movement of phone in users pocket
- Sends notifications, SMS alerts to emergency contact and prevents user driving a car

Automated Mapping and Pathing System - Third Year Project   Python, Machine Learning

- Machine learning model to detect sections of a golf course
- Adapted an agricultural complete coverage path planning library to generate paths within detected sections
- Size and orientation correction using GPS coordinates

Maths Interpreter and plotter   F#, C#

- Math interpreter written in F# and GUI written with C#
- Used C# GUI API wpf to build clean, performant user interface
- Used CUDA and parellel programming to render area of graph

"Bop It" Type Device   STM32, FPGA, C

- Developed embedded system using an STM32 board and various sensors to create game
- Gained great understing of Firmware Development
- Achieved outstanding marks for programming in C with 80%

Skills

C++, C, Python, Java, Lua, Bash, F#, C# Maven, Gradle, Nuget, STM32, C, Hardware, Linux, Bash

Experience

General Online Assistant and Driver, Sainsburys – Ipswich/Norwich   Dec 2021 - PRESENT

- Working in a team to deliver 100% of all deliveries on time
- Deployed across teams delivering high client satisfaction
- Strong focus on Customer Service with high number of postive review from customers

Work Experience, BT – Adastral Park   July 2019 - July 2019

- Developed internal web based system for BT
- Completed User Expreince testing, and recived 90% positive review from internal users
- Site was developed with performance in mind due to large user base