NELSON DA SILVA

Electronic and Information Engineering Student Imperial College London London, United Kingdom nds19.github.io +447449084516 nelsondsbusiness@gmail.com www.linkedin.com/in/nelson-da-silva19

Profile Summary

A driven, versatile perfectionist looking to gain experience in the software engineering sector. Past experiences in leading and operating in small teams in addition to my strive to maintain or cultivate quality makes me a perfect candidate for any role.

EDUCATION

Imperial College London

Oct 2019 - Present

- MEng Electronic and Information Engineering
- Predicted 2:1
- Modules include: Digital and Computer Architecture, Programming for Engineers, Instruction Architectures and Compilers, Software Systems

St. Paul's Catholic College

Sep 2012 - July 2019

- A-Levels in Further Maths (A*), Maths (A*) and Physics (A)
- GCSEs: 9 x1, 8 x2, A*s x7, A x1 (9 in Maths and A* in Physics)
- Accolades: Student Council, Prefect, Eco Team member, Yearbook team leader
- The Geoff Clowser Award for Excellence in Technology

WORK EXPERIENCE

OTM Servo (1 week) Work Shadowing

July 2018

- Experienced how a workplace functions when handling major projects which are broken down into tasks for several specialised teams.
- Undertook a project in replicating a component in software using CAD as a group.

PROJECTS

World of DE10s

6-person, Spring 2021

Integrated an object tilt detection scheme using an FPGA and accelerometer to use the FPGA as a game controller; used C, Python and Quartus.

C to MIPS Compiler

2-person, Spring 2021

Developed a compiler capable of lexing C code into its tokens using Flex, parsing the tokens to determine the format using Yacc and compiling into MIPS code.

Verilog MIPS CPU

6-person, Spring 2021

Engineered a testbench to test a MIPS CPU capable of executing 48 instructions using Verilog and C++.

Percy the Mars Rover

6-person, Summer 2021

Manufactured a detection algorithm that detects and calculates the distance of ping pong balls from a camera using an FPGA; coded in Verilog and C.

Countdown App

Individual, Summer 2021

Research and underwent the process of building an app from scratch then applied this to create my own implementation of a countdown/timer app using Kotlin and Android Studio.

MU0 CPU

3-person, Summer 2020

Coproduced a specialised MU0 CPU on Quartus Prime.

ADDITIONAL INFORMATION

Languages

• English (Proficient)

Portuguese (Native)

Achievements & Interests

- Raised £101 and ran 60km for Movember to produce awareness on issues regarding mental health and to raise money towards battling testicular cancer,
- Gained the best result in my year group in UKMT's British Mathematical Olympiad,
- Plays in attack for an Imperial College football team,
- Captained a 5-a-side football team in an inter-university league,
- Video editing using PowerDirector by Dell,
- Regularly competed in online tournaments with multiple of Imperial's e-sports teams.