Mihai-Emilian Buduroi

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> Final year student with experience in embedded software and DevOps. After graduation with my degree in **BSc Computer Science (with an Industrial Year)**, I plan to work as a Software Engineer in embedded systems.

Education

BSc Computer Science with a Year in Industry at University of Birmingham - 2016 - 2020

- Finished my final year **Project Hawk** - designed and assembled the PCB, developed the network engine, as well as the android remote system for a 4G drone - **See my dissertation**
- On track for a 1st class degree, studying Kernel programming, Network and Security, Embedded Software Engineering and Computer Systems & Architecture waiting for examination results
- I accomplished First as my final mark in Computer Systems and Architecture while studying MIPS and ARM processor architecture, as well as in C/C++ module and Software Engineering

A Level equivalent (Romanian Baccalaureate) in Computer Science and Advanced Maths - 2012 - 2016

> 9.1 / 10 in C programming 9.0 / 10 in Advanced Maths

Key Skills

- Programming C and C++ in Linux kernel and embedded software with ARM RISC architecture - **see this project**
- Leadership, taking the role as a scrum master, improving team velocity during sprint planning sessions
- PCB prototyping and design, SMD soldering/reflow, familiarity with hardware components and ICs _see my final year project pcb_
- Low-level communication protocols such as PWM, UART, SPI, I2C and PPM
- Dynamic/remote debugging, memory checks, leak prevention with Valgrind and LWN (both in user space and kernel space), disassembled binary
- Object-oriented, multi-threading programming and networking in **JAVA**, C/C++
- Markup languages such as XML, Markdown and LaTeX
- Time and resource management, list-keeping, productivity enhancement _see my live to-do list_

Work Experience

Web Developer - magic42 LTD Birmingham, October 2018 - July 2019

- Managed a database project which led to the GDPR compliance of the business
- Supervised the integration, deployment and downtime prevention on a client's live server for 4 months
- Avoided client dissatisfaction, opting in to deliver a security risk assessment, highlighting the patches missing, backdoors into the database and open redirects, on a project that did not go according to the plan
- Enhanced the code review process productivity by integrating a notification system
- Maintained virtualization software such as Docker and Vagrant
- Presented quarterly fitness workshops on healthy eating and exercising, which positively impacted my colleagues' health

IT Project Manager - Study Abroad & Exchanges University of Birmingham, Feb 2018 - June 2019

- Merged two databases to comply with ERASMUS Standards
- Optimised team's website for search engines and increased number of visits by 19%
- Improved office's workflow by coaching employees on writing SQL scripts for Excel

Freelance Web Developer - Real-Estate Agency, May 2018 - September 2018

- Delivered the design, implementation and deployment of a website for a real-estate agency
- Recruited a graphic designer and partnered in satisfying client requirements
- Deployed Elastic IP and load balancing on the NGINX server, on Amazon's EC2
- Devised backups and integration with Jenkins and Github (link)
- Implemented a custom plugin using Google Maps API for property localisation
- Improved user experience by integrating social media login for Google, Facebook and Twitter

Self-taught skills

- Acquired experience in soldering and PCB design in EAGLE for my Final Year Project
- Developed skill in journal keeping and goal setting by reading "*How to be a productivity Ninja*" by Graham Allcott
- Expanded abilities in tracking and developing habits by reading "*Don't shoot the dog*" by Karen Pryor and "*Power of Habit*" by Charles Duhigg
- Enrolled in Google CodeCamp and strengthened skills in cloud computing
- LAMP/LEMP stack deployment
- CA Certificate deployment with *Let's encrypt*/*Cryptbot*
- Learned AWS suite tools: Route53, RDS, Security groups during a hackathon

Languages

- **English** (Fluent), **French** (Intermediate), **Romanian** (Native),

Hobbies

- PCB design and prototyping paired with IoT development in enabling internet in thumb-size embedded devices - for example, I made a wireless remote control that communicates to two relays and a thermostat using ESP8266
- Gym, road cycling and swimming - Participating in 120km rides and feeding my interest in sport science by reading studies on nutrition and muscle mechanics
- Self-development books, podcasts, cooking and drinking camomile tea