

EDUCATION

- **The University of Manchester**

BSc of Computer Science - First Class Degree

 - **Relevant Coursework:** Mobile Systems, Machine Learning, Distributed Systems, Software Engineering, Computer Graphics and Image Processing, Probabilities, Computer Vision, AI&Games.
 - **External Courses:** Digital Signal Processing(EPFL), Secure and Private AI Nanodegree(Udacity), Leadership in Action(UCIL), Essential Enterprise(UCIL).

Manchester, UK

Sept. 2016 – Jun. 2020

WORK EXPERIENCE

- **Hubble Protocol**

DeFi Software Engineer

 - **Project description:**
We are building an overcollateralised stablecoin (USDH) on Solana. My responsibilities are to write and review Rust code using Anchor framework, which runs on Solana blockchain. I am working on various features such as supporting new types of collaterals, integrating other protocols via CPI, scale the functionalities of our smart contract, writing integration tests. etc. Also, I am an active member of the Hubble support team and I answer and explain the concepts and mechanisms of Hubble on the public Discord and respond to users' tickets.

Bucharest, Romania

January 2022 - Now
- **Microsoft**

Software Engineer

 - **Project description:**
Work on an internal learning platform, using the microservices architecture and GraphQL, .NET, Azure CosmosDB, Geneva and ServiceFabric. My contributions are on the full stack, with more focus on backend and devops. Besides that, I am the main contributor on the data science and recommender system that suggests courses and playlists of courses to users and managers.

Vancouver, Canada

January 2021 - January 2022
- **GS Technologies**

Co-Founder, CTO

 - **Responsibilities:**
Built a medical management platform using Go, Gin-Gonic and PostgreSQL. All the services are containerised using Docker and they can easily scale to support a large number of requests by using Go internal mechanisms and infrastructure. The platform is currently in production and used by customers.
Decided and implemented internal infrastructure such as testing, staging and release environments, CI/CD, documentation, log management tools.
Designed and implemented GSConnector, a product facilitates remote control, scheduling and alerting for large scale public lighting systems. All the microservices code was written in Go using Gin and HTTP packages.

Bucharest, Romania

April 2020 - January 2022
- **Edge Delta**

Software Engineer Contract

 - **Project description:** Software Engineering contract with EdgeDelta, a cutting edge Federated Learning and log management tool. My work is focused on improving log clustering accuracy and performance and the analytics which are based on clustering.

Bucharest, Romania

March 2020 - September 2020
- **DreamIn**

Devops Engineer Contract

 - **Project description:** Devops & Infrastructure contract engineer for DreamIn, a mobile advertising company with over 9500 successful campaigns. My work includes automating their pipelines, building and maintaining internal tools, CI/CD, improving their on premise infrastructure and facilitating their scale-up.

Bucharest, Romania

March 2020 - September 2020
- **Microsoft**

Azure Cloud and Artificial Intelligence intern

 - **Project description:** Part of IoT&Edge team, working on integrating Azure EventGrid (Azure's event based communication system) with the IoT blob storage module, for offering developers the flexibility to move their applications from cloud to edge devices.

Redmond, WA

June 2019 - Sept 2019
- **Twitter**

Media Platform intern

Seattle, WA

April 2019 - June 2019

- **Project description:** Media Platform engineer, working on designing and implementing a performance measurement and error scribing framework for the media upload pipeline. Moreover, I have done experiments on using HEVC instead of H264 for User Generated Content and assessing the quality improvements and bitrate reduction.

- **Bloomberg LP** London, UK
Software Engineering placement *Oct. 2018 - March 2019*
 - **Project description:** Member of the Communication Channels Storage team, focused on distributed databases, the Terminal messaging system and large scale storage. The projects I contributed to include the LDAP system, designing and implementing APIs for other teams and improving whitelisting pipelines.
- **Twitter** London, UK
Media Client Infrastructure intern *Jun. 2018 - Sept. 2018*
 - **Project description:** Worked on designing and implementing looping videos using Http Live Streaming and mp4 codecs on iOS, focused on improving performance and reducing data usage. Moreover, I contributed to improving network measurements and increasing video on demand streaming quality for low bandwidth networks and data saving usage of the app.
- **Seers CRM** Bucharest, Romania
Software Engineering intern *Jun. 2017 - Sept. 2017*
 - **Project description:** Contributed to a web application which converts online forms into the official documents needed to start a new business from scratch, based on the legal requirements of Romania.

TECHNICAL EXPERIENCE

- **Single Image Depth Estimation:** Built and trained an U-Net which performs relative depth estimation based on a single image. The model was trained on the RGB-D images from the NYUv2 dataset and it is based on the CodeSLAM paper. Alongside that, I designed and run a custom benchmark based on the common metrics from literature, augmented with signal processing metrics.
- **Machine Learning:** Worked on small supervised learning projects, such as plant recognition, spam detection, based on simple approaches such as KNN, Linear Regression, Logistic Regression or Naive Bayes classifier.
- **MP3 Encoder:** Implemented various features of an MP3 encoder, such as subband filtering, the quantizer and the general filter.
- **Kalah:** Developed an Minimax based agent, optimized with Alpha-Beta pruning and parallel computation which plays Kalah against other agents.

AWARDS AND ACTIVITIES

- **AI Privacy and Security scholarship:** Received Facebook's Private and Secure AI scholarship: 2019.
- **ACM-ICPC:** Qualified for North West European Regional Competition: 2017.
- **Bloomberg CodeCon:** World final stage qualification: 2016.
- **National Mathematics Olympiad:** Two consecutive participations: 2014, 2015.

SKILLS

- **Programming languages:** Go, Rust, C#, Python, Java, TypeScript, Scala, Swift, React, C++, Objective C.
- **Technologies:** Solana, Anchor, Git, Phabricator, Docker, Kubernetes, Azure, PyTorch(Beginner), .NET, NumPy, Pandas, NodeJs, ExpressJs, Jupyter Notebook, Unix, SQL, Hadoop(Beginner), FFMpeg(Beginner), Presto, ELK, Tableau.
- **Other Skills:** Agile Methodology, Kanban, Teamwork, Time management, Problem solving, Data analysis, Presentation skills, Critical thinking, Task management, English(Proficient), Romanian(Native), Spanish(Beginner).