
MARTIN TEOHAROV

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[github](#)

SOFTWARE ENGINEER

Summary

A proactive professional with a strong sense of ownership and a passion for solving engineering challenges. I will work on anything that positively impacts the world and creates tangible value. Currently focusing on full-stack web development, but can adapt to any environment quickly.

Skills

Soft Skills

I believe in the philosophy of **extreme ownership**. I like to apply it to my work and life.

I enjoy collaboration and can effectively communicate with team members and clients.

Javascript Stack

JS/Typescript, React, Nodejs, Bun, Express, SQLite, MongoDB.

Languages

Javascript/Typescript, Python, Rust, C/C++, Java.

Experience

Royal Surrey NHS Foundation Trust

August 2023 - Present

Computer Scientist

As the sole developer, I led a project to anonymize and collect data from dental clinics spanning across the UK. I made site visits to each clinic to install the required software and retrieve the necessary data.

Sole developer of an HL7 pseudonymization tool/library that is used in a larger ML project. The tool is used to extract/replace sensitive patient information from HL7 messages sent over the network.

Worked as a frontend developer and DevOps engineer on the **National Breast Imaging Academy** project. Beside creating UI components, I also worked on improving the development workflow by integrating the multitude of services and tools used in the project into a unified monorepo.

Melon

September 2021 - November 2022

Backend Engineer

Collaborated with a London-based client, **Ruuby**, as a Full-stack Web Developer.

Utilized technologies such as React, React Native, TypeScript, Node, and AWS.

Responsibilities included developing new features, resolving bugs, collaborating with teammates, and providing code reviews.

PhiAcademy

June 2021 - September 2021

Full Stack Web Developer

Served as the sole developer responsible for all technical aspects of the platform.

Employed Next (React), NodeJS, Express, and MongoDB as the primary development stack.

Created and implemented a bespoke UI/UX design for the platform.

Developed an end-to-end WebRTC video conferencing system with a whiteboard integration and an advanced scheduling system for booking appointments.

Occasionally used Python for automation and machine learning tasks.

Projects

PixPox

PixPox is a 2D Pixel Game Engine built around the concept of simulating physics using Cellular Automata interactions. It incorporates seamless multi-threading while providing developers with powerful abstractions that simplify the development process. PixPox is in active development at the moment and you will be able to read about the 'vision' of the project as well as the various design decisions that I take [here](#):

Hangman in ARMv6 Assembly

A fun and slightly complex first year University project. The task was to develop the classic word game 'Hangman' from scratch only using low-level assembly code.

Virtual MMU

A first year University project for the module 'Operating Systems'. It's a simple memory manager for a virtually simulated MMU. It mimics actual hardware & OS behaviour. This was a fun project that gave me a glimpse of what an Operating System does behind the scenes.

Education

University of Surrey, England, UK

2020-2023

BSc Computer Science

At university, I split my time between studying, working and developing my own projects, enjoying the challenges and the opportunities that came with them.

I most enjoyed studying Computer Networking, Operating Systems, Algorithms and Data Structures, Software Engineering practices and Machine Learning - including image classification and language models (PyTorch & Tensorflow).

Participated in several group projects with dynamic teams. For my final year project I created PixPox - a 2D General Purpose Game Engine built around the concept of simulating physics using Cellular Automata interactions.

Софийска Математическа Гимназия

2012 - 2020

Highschool of Mathematics in Sofia

I received my education at Bulgaria's leading public school for Mathematics, where I had the opportunity to focus on enhancing my mathematics and programming skills.

During my time there, I was part of the robotics club where I contributed to the development of drones from scratch. I specialized in setting up live telemetry for onboard computers.

Through my involvement in the robotics club, I developed strong problem-solving, innovation and teamwork skills through group projects.