

MATTHEW CHAN

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EMPLOYMENT

Zyphr, CEO & Cofounder, Vancouver, BC

Aug. 2020 - Dec. 2021

- Built a software development and consulting company that generated over **\$400K in revenue while enrolled in a full course load**.
- Led the development of Python applications from start to finish with companies such as **Google, Jane Street, Hyperloop**, and **Deloitte**.
- Managed **3 software developers** (1 on 1's, code reviews, guidance, agile methodologies).
- **Highlights:** worked on an algorithm used by a utility provider to predict low voltage electrical line locations, managed the launch of a feature to a library with over **100 million downloads per year**, and delivered dashboards and tools used by **thousands of end users**.

Plotly, Solutions Engineer, Montreal, QC

Mar. 2019 - Mar. 2020

- **Lead solutions engineer** responsible for customer success, developer relations, and customer acquisition, contributing to **40% of revenue (\$4MM)**.
- Built applications for business intelligence, financial reporting, and data analytics used by British Petroleum, Hyperloop, and more.
- Designed SQL, NoSQL databases, and message brokering systems that resulted in an increase in application performance by **32x**.
- Performed data cleaning and code optimization on customer datasets with a performance increase of **12x**.
- Wrote internal CI/CD tools and tooling to track customers enterprise server usage and application dependencies.
- Added an ideograph and circos graph feature using React.js to an open-source bioinformatics library (**450+ stars on GitHub**).

Nuance Communications, Software Developer Intern, Montreal, QC

Jan. 2019 - Mar. 2019

- Created an Android application for in-house natural language understanding models that sped up data labeling and validation by **10x**.

PROJECTS

Decentralized Messaging Application (ETH NYC)

- Built a decentralized messaging application that encrypts and stores messages on the blockchain utilizing WebSockets, JSON-RPC nodes, the Graph, and React.js, which raised a **\$650K USD pre-seed round** and won a sponsor prize from Polygon.
- Wrote smart contracts to send tokens to multiple users, requests to buy NFT, and peer-to-peer lending.

0xMacro Engineering Fellowship (Solidity Bootcamp)

- Built and tested Solidity smart contracts using Hardhat: **liquidity pool (Uniswap V2)**, **DAO (governor bravo)**, **crowdfunding (ERC-721)**, and **ICO (ERC-20)**.

Personal Website (CMS)

- Created and designed a website with a custom CMS to easily manage projects and blog posts in React.js, Tailwind.css, and Django.
- Deployed the application to AWS (S3, Cloudfront, EC2) and set up load balancing for the backend API using Docker and Nginx.

Web2 Custodial Wallet Integration (ETH Lisbon)

- Worked on a backend API service in Node.js that manages wallet generation and custody for Web2 applications, built a Next.js application to showcase the API, and created generic ERC-721 smart contracts deployed by the API.

Capstone (Microsoft)

- Built a 3D educational video game using Unity, React, and .NET where I worked on the game interaction and inventory system.
- Designed and implemented REST APIs using .NET, JavaScript, and SQL for communication between the game and the dashboard.

EDUCATION

University of British Columbia (Kelowna, BC)

Dec. 2021

B.ASc Electrical Engineering

Relevant Courses: Parallel Programming, Operating Systems, Databases, Discrete Math, Data Structures, Networks, Computer Vision, Machine Learning

SKILLS

PROFICIENT: Python, Java, JavaScript, HTML, CSS, SQL, Solidity, Bash, TypeScript

FAMILIAR: C, C++, C#, Verilog, Assembly (ARM), Golang

FRAMEWORKS & TOOLS: git, Linux, Redis, React.js, Node.js, Plotly, Dash, Docker, Heroku, AWS, GCP, .NET, Kubernetes, MongoDB, Chai, Hardhat, Ethers.js, Mocha, PyTest, Azure, OpenMP, Cuda, Celery, Unity, Flask, Next.js