**Mahmut Baran Turkmen**

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London, Greater London, United Kingdom

WORK EXPERIENCE

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| **Junior Front End Engineer** | **07/2023 – Present** |

VIOOH (JCDecaux subsidiary)

* Implemented the core UI components of a sell-side advertisement exchange supporting $150M+ in annual transactions using React.js, Typescript and Redux
* Owned and led the design system development and release process using React.js, Storybook and GitHub Actions to standardise UI components across 4 teams, reducing UI-related bug issues by ~50%
* Reduced CI pipeline cost by ~70% and decreased test suite execution time from 26m to 5m by introducing parallelisation for Jest tests, linting, formatting, and building steps on GitHub Actions
* Cut tabular data loading time from 120s to 5s by replacing a third-party table service with a custom AG Grid code, increasing the customer satisfaction score to 8.3/10 (by +3.5/10)
* Developed a new customer overview feature to handle 25+ deals in parallel by fixing race conditions in Redux state and network requests with TypeScript
* Optimised 50K+ objects’ loading time on the map by implementing a proximity-based filtering algorithm, reducing load time by 43%

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| **Back End Developer, Blockchain** *(Freelance)* | **03/2022 – 09/2022** |

Ajinomoto Turkiye

* Built a REST API in JavaScript integrating IPFS storage with an EVM blockchain to enable product ingredient verification
* Uncovered business-impacting E2E errors by achieving 100% test coverage in Jest and implementing error handling
* Authored API endpoint documentation in OpenAPI Specification to simplify integration for external teams
* Deployed the API to the production environment and handled 5K+ monthly active users

PROJECTS

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| **Tapit Co.** [**(project)**](https://tapit.company/) | **05/2024 – Present** |

* Developed a full stack web app in Next.js, React.js and TypeScript with a physical product line that supports 10+ B2B clients to acquire new paying customers through personalised contactless accessories
* Implemented real-time error catching using Sentry, fixing a production error within 24 hours after it was raised

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| **Decentralised Order Book Exchange** [**(project)**](https://github.com/cjxe/on-chain-dex) |  |

* Built a real-time trading UI using WebSockets and JavaScript that achieves sub-100ms latency to update a live order book
* Created a central limit order book and its order-matching engine in Solidity to execute on-chain orders on EVMs
* Developed 25+ integration tests in Mocha and Hardhat to validate market, limit, partial orders, and cancellations

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| **Algorithmic Trading Bot** |

* Implemented a low-latency trading algorithm on live EVM-compatible transaction pools using JavaScript, generating a 13% return on £15K over 6 months
* Rerouted transactions via self-hosted full BSC node to improve the transaction speed, increasing the profitability by 200%

EDUCATION

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| **Durham University** | **09/2019 – 06/2022** |

Bachelor of Science in Computer Science

* **Modules:** Algorithms, Data Structures, Human-AI Interaction Design, Networks, Distributed Systems and Databases
* **Dissertation:** Universally Accessible Order Book Style Decentralised Exchange [**(paper)**](https://github.com/cjxe/on-chain-dex/blob/main/report/Project_Report.pdf)
* Course Representative

TECHNICAL SKILLS

* **Languages:** JavaScript, TypeScript, Python, Solidity, Bash, SQL, HTML, CSS
* **Technologies:** React.js, Next.js, Redux, Storybook, Tailwind CSS, SQLite, MongoDB, Hardhat
* **DevOps:** AWS, GitHub Actions, Datadog, Cloudflare, Git, Jest, Swagger