Patryk Lezon

Junior Software Engineer
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Profile Summary

- Junior Software Engineer experienced in building and deploying full stack solutions. Well versed in Object-Oriented Programming (OOP), Data Structures & Algorithms, Machine Learning & AI, as well as web3 technologies.
- Full-stack developer with a strong command of programming languages including JavaScript, Python, Java, and C++. Proficient in designing UIs with React, writing server-side code and building APIs, and manipulating SQL & NoSQL databases. Solid understanding of Authentication, Security, and version control.

Education

Hunter College NYC
Bachelor's in Computer Science (Math minor)
New York City, NY, 2019-2022 **GPA: 3.15/4.0**
Coursework: Math minor - Data Structures and Algorithms, AI, Databases, Linear Algebra, Multivariate Calculus, Probability Theory, Differential Calculus

iXperience Data Science Bootcamp
Remote, Jul. 2021 - Aug. 2021

Technical Skills

Languages: JavaScript, Python, C++, Java, SQL, Solidity, HTML/CSS
JavaScript stack: **Superset:** TypeScript / **FE Framework:** React, React Native / **Libraries:** Electron / **Back-end:** Node.js, Express.js
Python stack: **Libraries:** NumPy / **Data:** Pandas / **ML**: Sci-kit Learn, Keras
Databases: **SQL:** MySQL, PostgreSQL / **NoSQL:** MongoDB, Neo4j
Dev Tools: Git, Postman, Docker, Bash

Languages

English: Fluent **Polish**: Native level

Professional Experience

Differential Capital Data Science (intern)

Johannesburg, South Africa Jul. 2021 - Aug. 2021

- Participated in the technical effort of an asset management firm by implementing Machine Learning algorithms, delivering clean and scalable code in Python, and leveraging libraries such as Scikit-Learn, Keras, NumPy and Pandas.
- Worked closely with the Chief Data Scientist and engaged with their clients and stakeholders to present results.
- Thoroughly assessed and defined technical requirements, to design a system architecture optimized for speed and scalability, with clarity on time, cost and impact.
- Conducted exploratory data analysis on large datasets and performed data cleaning. Leveraged a wide array of algorithms to test hypotheses, evaluated models and tuned hyperparameters. Deployed models, before optimizing and monitoring performance in a production environment.
- Designed and implemented a Python package for feature engineering the dataset (featuring multiple tables of time series data with company names, volumes, prices, as well as other financial information), preprocessing the dataset, optimizing the model with multithreading and generating metrics off the results.

Projects Experience

Ctris

Jul. 2022 - Aug. 2022

- Re-created an entire tetris-like game, using C++ with the SFML library to render sprites.
- Opted for a procedural programming approach, leveraging mathematical knowledge to optimize code calculations. Handle complex events to allow for responsiveness and minimize delays. Engineered a framerate system to run the code within specific time intervals and allow for a smooth gameplay experience.

MNTR

Apr. 2022 - Jun. 2022

- Delivered a desktop application allowing users to mint from any ERC721 smart contract, as well as storing profiles for several wallets to mass mint.
- Built a user-friendly UI with React and utilized the Electron.js library to build the desktop app. Developed an efficient back-end with Node.js.

NFT

Mar. 2022 - Jun. 2022

- Engineered a game hosted on the Ethereum blockchain, containing 2 NFTs ("Warrior" and "Land") giving users the ability to mint "Warriors" and stake them for 24 hours to generate "Land". NFT owners can also stake both NFTs to passively generate a $RESOURCE token.
- Utilized web3 technologies, including Solidity for Smart contracts, as well as Node.js, hardhat, ethers and Chai.

Zelus (Capstone Project)

Sept. 2021- Dec. 2021

- Conceptualized and delivered a web-based workout tracking web & mobile application where users can save and share workout templates.
- Coded using best practices of HTML5, key & advanced functionalities of CSS3 (Flexbox, Grid, animations, CSS variables and Sass), ensuring responsiveness and optimizing for accessibility and performance.
- Crafted an engaging user experience with React and React Native as a front-end framework, allowing for dynamic rendering of modern UI components.

- Built an Express server on Node.js, for rapid scalability and implementation by using JS on both sides of the stack.
- Utilized PostgreSQL as a Relational Database Management System, wrote schemas and designed an API allowing users to perform CRUD operations on workout data.

Virtue Quant

Aug. 2021- Oct. 2021

- Analyzed financial cryptocurrency data using ML to predict trends, using Python, Sci-kit Learn, NumPy and Pandas.

Mynt Finance (24 Hour Hackathon Winner)

Jan. 2021- Jan. 2021

- Designed and implemented a stock portfolio application, allowing users to visualize their stock holdings, utilizing React in the front-end and Node.js on the server-side. Submitted the project and won the competition.