Jack Doherty

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EDUCATION

Loyola University Maryland

August 2020 - May 2024

Bachelor of Information Systems & Data Analytics

Baltimore, MD

· Relevant Coursework: Data Structures, Algorithms, Database Systems, Data Science, Statistics, Computer Networks, Data Mining, Cyber Security

EXPERIENCE

Software Engineer Trainee

March 2025 - Present

Remote

Revature

 Actively training in a rigorous 12 week Java development program, mastering Spring Framework, Hibernate, and RESTful API development to build scalable enterprise applications.

- · Developing hands-on proficiency in object-oriented programming, data structures, and algorithms through real-world Java projects.
- Collaborating in agile teams to design, code, and test full-stack applications using Java, SQL, and front-end technologies like HTML, CSS, and JavaScript, ensuring robust functionality and user experience.

Software Engineer & Data Analyst (Contract)

June 2024 - January 2025

Sports Logic Zone

Remote

- · Developed and deployed a full-stack web application providing data-driven sports analytics and strategic tools, serving over 100 users with real-time insights.
- Implemented automated data processing pipelines with Node.js and Express.js, analyzing win probabilities by processing over 10,000 daily odds entries. Utilized efficient algorithms to deliver actionable insights via interactive React visualizations.
- Utilized MongoDB for scalable data storage and management. Enhanced application reliability by integrating CI/CD pipelines with GitHub Actions, ensuring seamless updates.

Business Analyst Intern

June 2023 - August 2023

Boar's Head

New York, NY

- Developed Python scripts to process 100+ data codes from a data lake, creating an efficient pipeline for analysis that enhanced decision-making processes.
- Built a Python-based document automation pipeline on Azure, reducing wiki creation time by 95%, showcasing initiative and systems optimization skills.
- Analyzed trends using SQL and Excel, centralizing codebase on Azure for 10+ partners, improving collaboration and saving 50+ hours weekly.

PROJECT

Solidity Blockchain Development Projects

- Developed and deployed ERC-20 and ERC-721 tokens using Solidity and OpenZeppelin, with deployments on Ronin Saigon testnet and metadata on IPFS, demonstrating blockchain programming expertise.
- Built a decentralized staking dApp on the Ronin blockchain, integrating Chainlink Data Feeds for real-time price-based reward calculations, showcasing ability to work with complex blockchain systems.
- Implemented a cross-chain token using Chainlink's CCIP for interoperability between Ronin and Base, highlighting skills in secure, scalable blockchain infrastructure.

PredictArb

- Developed an automated arbitrage trading system that identifies and analyzes price discrepancies between Polymarket and Kalshi prediction markets.
- Implemented real-time order book monitoring using WebSocket connections to track market movements across multiple platforms simultaneously.
- · Created advanced price comparison algorithms that calculate profitable trading opportunities based on combined probability differentials.

Premier League Match Predictor

- Developed a machine learning model using Random Forest Classifier, achieving a win prediction accuracy of 62.5%, to forecast outcomes of English Premier League matches based on historical data.
- Engineered features by calculating rolling averages for key statistics like goals for and against, significantly enhancing the model's predictive power for match outcomes.
- Implemented data preprocessing techniques, including date conversion and categorical encoding, which improved model training efficiency and prediction accuracy by addressing data inconsistencies.

INVOLVEMENT

Captain

September 2022 - May 2024

- Loyola Club Basketball
- Led a team of 20 student-athletes, organizing weekly practice sessions and skill development programs, which led to three consecutive winning seasons.
- Organized monthly competitive basketball events against university clubs, raising over \$1,000 for charity through successful fundraising initiatives.

SKILLS

Languages: JavaScript, Python, TypeScript, Java, Solidity, SQL, HTML, CSS

Developer Tools: Git, GitHub, AWS, Docker, Kubernetes, PostgreSQL, MongoDB, Azure, CI/CD, Postman, Selenium, Figma, Vercel, Supabase, Prisma

Libraries/Frameworks: React, Next.js, Node.js, Express.js, Spring Boot, Angular, Flask, Django, Tailwind CSS