Jorwin R. Reyes

US Citizen | jorwinreyes@outlook.com | (781)-330-6867 | LinkedIn: [Jorwin Reyes](#) | GitHub: [Jorwin-dev](#)

EDUCATION

University of Massachusetts Boston   **Boston, Massachusetts**

B.A. in Computer Science, Minor in Criminology   *Expected Graduation, May 2025*

- o   **Related Coursework:** Data Structures & Algorithms, Intermediate Computing, Programming in C, Computer Architecture & Organization, Advanced Data Structures & Algorithms, Cyber-Crime, Theory of Computation.

EXPERIENCE

Laboratory Research Assistant   **Boston, Massachusetts**

IDS Fellow in Data Science & Machine Learning   *Sep 2024 – Present*

- Conduct collaborative, interdisciplinary research using **AI**, **machine learning**, and **data science** to optimize 3D-printing parameters, enhancing print quality, speed, and mechanical properties.
- Design and execute experiments using **Python** for data collection, analysis and visualization.
- Develop predictive models using **scikit-learn**, optimizing performance with **hyperparameter tuning**.
- Perform **data preprocessing** and **EDA** to uncover relationships between print parameters and outcomes, employing libraries such as **pandas** or **seaborn**.
- Apply **multi-objective optimization** techniques to balance trade-offs, quality, and strength in 3D prints.
- Create visualizations, reports, presentations, and an **API** for parameter recommendations, bridging research and practical applications.

TECHNICAL SKILLS

In-Progress Certifications: CompTIA Network+ ---- Expected Dec 2024
Programming: Python (Jupyter, Flask), SQL, JavaScript, HTML, CSS (Sass/SCSS)
Libraries, Frameworks, Tools: ReactJS, NodeJS, VSCode, Git, LinuxOS, Excel, scikit-learn
Soft Skills: Teamwork, Public Speaking, Presentations, Communication, Leadership, Adaptability, Work Ethic

PROJECTS

O&R Landscaping & Construction   **Waltham, Massachusetts**

Website & Source Code   *Nov 2024 – Present*

- Developing a responsive website for a landscaping company, transitioning their online presence from social media to a more traditional, professional platform to **enhance** business visibility.
- Utilizing a **modern** tech stack (JavaScript, HTML, CSS, and ReactJS) to build a responsive and user-friendly website that is actively promoting the company in real time, with **direct impact** on client engagement and business growth.

AI Trading Bot   **Waltham, Massachusetts**

Source Code   *April 2024*

- Architected and engineered a fully automated **AI** trading bot using **Python** and the Lumibot framework.
- Developed an automated trading strategy leveraging sentiment analysis of news articles using a **machine learning** model to make buy/sell decisions.
- Utilized Alpaca API for **real-time** market data retrieval and order execution, employing position sizing based on available cash and setting take-profit and stop-loss orders for **risk management**.

Blockchain Network   **Waltham, Massachusetts**

Source Code   *March 2024*

- Utilized Python to **develop** a blockchain network with proof-of-work consensus mechanism.
- Integrated Flask to create a RESTful API for interaction with the blockchain network, allowing for mining new blocks, creating transactions, viewing the full blockchain, and resolving conflicts between nodes.
- Implemented a **consensus algorithm** based on the longest chain rule to resolve conflicts and ensure network integrity among nodes in the blockchain network.

ACTIVITIES AND LEADERSHIP

Institute of Diversity Science's Research Fellowship Funded by the Sloan Foundation   **Boston, Massachusetts**

Interdisciplinary research on tech and diversity, focusing on underrepresented communities in STEM   *June 2024 – Present*