

JAY UKWE

jay.ukwe@gmail.com || www.linkedin.com/in/jay-ukwe || <https://github.com/jukwe> || (832) 441-1317 || Richmond, TX 77407

EDUCATION

University of Houston , Houston, TX	Jan 2025 - Present
Bachelors of Science in Computer Science	
Relevant Coursework: Statistics, Database Systems, Algorithm and Data Structures, Numerical Methods, Software Design, Operating Systems, Introduction to Automata and Computability	
Houston Community College , Houston, TX	Aug 2023 - Dec 2024
Bachelors of Science in Computer Science	
Relevant Coursework: Linear Algebra, Discrete Mathematics, Computer Science and Programming, Introduction to Programming, Programming and Data Structures, Computer Organization and Architecture	
University of Texas at Austin , Austin, TX	Aug 2022 - May 2023
Bachelor of Science in Electrical and Computer Engineering	

WORK EXPERIENCE

Software Engineer Whitson	Aug 2024 – Present (Part-Time) May 2024 – Aug 2024 (Intern)
<ul style="list-style-type: none">Develop and maintain full-stack features using Vue.js on the frontend and Python (Flask, SQLAlchemy) on the backend, supporting a production system backed by PostgreSQLDesigned and implemented file upload workflows, building corresponding backend endpoints and frontend components to ensure reliable data ingestionContributed to bug fixes, client support, and feature enhancements, improving application stability and usabilityWork on the Data Integration team, designing and implementing external API endpoints to import and export data between the platform and external sourcesIntegrate and process data using Snowflake, Databricks, and Peloton, supporting scalable data pipelines and analytics workflowsDeploy and maintain services using Kubernetes on Google Cloud, collaborating via Bitbucket with Git-based workflowsUtilize Ubuntu and Bash scripting for development, debugging, and environment managementTook on increased ownership after internship, onboarding and mentoring new interns and contributing to system design discussions	

RELEVANT PROJECTS

Solana Auto Buy and Sell Trading Bot | Personal Project

Tools: *TypeScript, Node.js, Solana Web3.js, Jupiter Swap API, SQLite, Winston, WebSocket, Helius RPC*

- Built a high-frequency trading bot on Solana that automates token buys/sells using real-time market signals
- Implemented dynamic trade execution logic using Jupiter's Swap API with configurable take-profit and stop-loss strategies
- Integrated WebSocket-based signal ingestion to enable low-latency execution on Solana mainnet
- Developed a price monitoring and auto-sell system with retry logic, failure handling, and comprehensive logging
- Persisted trade history and PnL in SQLite for post-trade analysis

Impact: Supports 50+ daily trades and concurrent position monitoring with low latency and fault tolerance

Telegram Mint Signal WebSocket | Personal Project

Tools: *Python, Telethon, WebSocket, Solana RPC, Regular Expressions, JSON*

- Designed a real-time signal pipeline that extracts Solana token mint addresses from Telegram channels
- Built a Python-based Telegram listener using Telethon to monitor multiple channels simultaneously
- Parsed unstructured messages using regex validation and broadcast clean signals via WebSocket
- Optimized for low-latency delivery, enabling bots to react within seconds of announcements

Impact: Processes hundreds of messages daily while delivering reliable, noise-filtered mint signals

Cryptocurrency Telegram Bot | Personal Project

Tools: *Python, PostgreSQL, pyTelegramBotAPI, HTTP Requests, Solana RPC, BIP utilities, PostgreSQL Database*

- Developed a DeFi-focused Telegram bot for crypto acquisition and token swaps on Solana
- Implemented BIP-32 hierarchical deterministic wallets with secure mnemonic generation
- Designed encrypted PostgreSQL-backed user authentication and storage
- Integrated Web3 swap functionality and Telegram-based user interfaces for seamless interaction

RELEVANT SKILLS

Certificates: IBM Python for Data Science, AI & Development (Coursera)

Programming Languages: Typescript, Javascript, Python, SQL, R

Data Science & Machine Learning: Keras, Scikit-learn, Predictive Modeling

Blockchain & Cryptocurrency: Solana RPC, BIP-32 Hierarchical Deterministic Wallets, Web3 Swap Creation, Cryptocurrency Transactions

Database Management: Telethon, Streamlit, pyTelegramBotAPI, Vue.js, Flask, RESTful API Design, External API Integrations, HTTP Requests, Web Socket Server, File Upload & Data Ingestion Workflows

Cloud, DevOps & Data Platforms: Google Cloud Platform (GCP), Kubernetes, Snowflake, Databricks, Peloton

Web Development & Tools: Telethon, Streamlit, pyTelegramBotAPI, Vue.js, Flask, RESTful API Design, External API Integrations, HTTP Requests, Web Socket Server, File Upload & Data Ingestion Workflows

Development Environments: Visual Studio Code, GitHub, Bitbucket, Git (CLI workflows), Ubuntu, Bash Scripting, MacOS

Languages: English (Native), Spanish (Intermediate)