Yaacob Abdullah

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EDUCATION

CUNY Queens College

New York, NY

Bachelor of Science in Computer Science

Expected Graduation - May 2025

Relevant coursework: Data Structures and Algorithms, Object Oriented Programming, Web and Internet Technologies

TECHNICAL SKILLS

Languages: TypeScript, JavaScript, HTML/CSS, Python, Java, C++, SQL, Solidity

Frameworks and libraries: React, Node.js, XState, MQTT, Express.js, Tailwind.css, Next.js, Pandas, Numpy, Scikit-learn **Developer Tools:** Git, VS Code, Visual Studio, Eclipse. Microsoft Office, Remix, Postman, Node-Red, Jupyter Notebooks

PROJECTS

Read Me a Story

May 2024

AI Bedtime Story Reader (OAuth 2.0, Node.js, Anthropic AI API, Google Text to Speech API)

- Developed at Node.js server to create a web application that generates AI-driven bedtime stories from user prompts and reads them to the user using Google Cloud Text-to-Speech API and Anthropic AI API.
- Implemented JSON Web Token based authentication and **OAuth 2.0** for secure access to Google Cloud services, ensuring data integrity and security in API communications.

TECHNICAL EXPERIENCE

Software Engineer Intern

New York, NY

Truebird (Node-RED, JavaScript, SQLite, React, Node.js, XState, MQTT)

May 2024 - June 2024

- Led development of a business intelligence dashboard by engineering complex **JavaScript** functions for processing historical transaction data, enabling precise tracking and visualization of customer activity, engagement, and habits.
- Utilized Node-RFD and MQTT to construct dynamic charts, tables, and summaries, allowing upper management to view
 internal data with a clear and intuitive dashboard interface, for transaction frequencies, improving operational insights.
- Crafted and optimized SQL queries to manage large datasets within SQLite, improving data access speed and processing.
- Engineered and updated user-facing front end animations, UX, and API functionality using **React**, **Node.js**, and **XState**. Filling in team gaps and doubled deployment rate

Software Engineer Intern

New York, NY

Open Avenues (Solidity, Node.js)

February 2024 - May 2024

- Developed a decentralized lottery application using **Solidity smart contracts**, gaining hands-on experience with networking protocols, modular architecture principles, and security best practices.
- Created Node.js lottery data API implementing reusable and scalable design patterns aligned with service-oriented
 architecture.
- Assembled secure and efficient smart contract design patterns, adhering to industry best practices for gas optimization, security audits, and code modularity.
- Implemented secure hashing algorithms like SHA-256 within smart contracts to ensure data integrity and support functionalities like randomness generation and commitment schemes.

Financial Analyst Intern

New York, NY

Reem Construction Corporation

November 2021 – Feb 2022

- Compiled and standardized weekly service data across multiple projects and service lines using Excel to enable accurate financial reporting.
- Supported pricing strategy analyses by researching competitive service rates and preparing price sensitivity models under supervision.
- Created monthly regional performance summaries outlining key service metrics like revenue, jobs completed, utilization and highlighted trends.
- Developed Microsoft Excel skills in consolidating, processing, visualizing, and deriving insights from complex service data guidance from finance team members.

LEADERSHIP ACTIVITIES & INTERESTS

Data Science Fellow

Headstarter AI

New York, NY

CUNY Tech Prep
 Selected for a competitive data science fellowship with students from across the 11 CUNY senior colleges where Fellows create technical projects using tools such as Python 3, Jupyter Notebooks, Pandas, Numpy, Scikit-learn, and SQL.

• Participate in weekly courses and learn industry best practices for exploratory data analysis (EDA), feature engineering, data collection and processing, statistical modeling, data visualization, machine learning techniques, data science processing, and big data.

Software Engineering Fellow

New York, NY

July 2024 - Present

- Creating a Pantry Tracker App utilizing React, NextJS, and Firebase to manage household inventories
- Developing a Customer Support AI with NextJS and OpenAI to provide automated responses to common queries