# Jonnathan Saavedra

## **EDUCATION**

City University of New York Queens College

Expected Graduation Winter 2025

Bachelor of Science, Computer Science

Relevant Coursework: Software Engineering, Data Structures & Algorithms, OOP in Java and C++, Applied ML

#### **SKILLS**

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

Technologies: React, LangChain, AWS, Azure, Bootstrap, SpringBoot, Git, MongoDB, Pandas

### **EXPERIENCE**

## Incoming Full Stack Developer Fellow at CUNY Tech Prep

Incoming Software Engineering Fellow at Headstarter AI

Fall 2024 -Spring 2025

July 2024-September 2024

July 2024-September 2024

# Software Engineering Intern

# Jupiter Leo Production LLC

- Improved educational platform with refined CSS, HTML, and JavaScript for an interactive UI.
- Implemented video event listeners and DOM manipulation for responsive web pages.
- Participated in code reviews and pair programming to enhance code quality.

## Software Engineering Research Intern

## Dennehy Microbiology Research Group

July 2023 - Present

Flushing, New York

- · Led automation projects through engineering, optimization, and testing for consistent performance
- · Engineered simulation algorithms in Python, integrating the Opentrons API, to emulate pathogen dynamics in hospital settings
- Automated microbiology experiments, with OT-2 robot ensuring precise and reproducible results improving efficiency by 70%

## Software Engineering Virtual Experience Participant

August 2022-December 2022

IP Morgan Chase & Co.

Virtual

- Implemented Python, Git, and JPMorgan Chase's open-source library called Perspective to fix broken client data feed scripts
- Set up a local dev environment by downloading the necessary files, tools, and dependencies
- Corrected errors in the repository to ensure proper web application functionality

## **PROJECTS**

#### Movie Review Website - Github

- Used Bootstrap and React to build a responsive website allowing users to review movies and look at the movie trailers
- Built backend using SpringBoot and Java for server-side logic and introduced a REST API to exchange data between frontend and MongoDB
- Integrated MongoDB database, using MongoDB Atlas and MongoDB Compass to store and manage user-generated content efficiently

# Technical Blog - Blog

- · Developed a technical blog using React, TypeScript, and Tailwind CSS, showcasing expertise in front-end development and modern web technologies
- Integrated Markdown support with react-markdown and syntax highlighting using react-syntax-highlighter, enhancing readability and code presentation
- Deployed website using Microsoft Azure and dynamic content loading through React Router, enabling smooth navigation and a seamless user experience

## Sentiment Analysis AI - Github

- Implemented a logistic regression ML model to perform binary sentiment classification on movie reviews to achieve an accuracy of [66.5%]
- Utilized Bag-of-Words (BOW) representation to convert textual reviews into feature vectors
- · Utilized gradient descent for optimization, iteratively adjusting model parameters (weights and biases) based on the prediction error

#### LEADERSHIP & PROFESSIONAL DEVELOPMENT

## Code for All QC- Executive Member

• Delivered technical workshops and networking opportunities, enhancing over 1,400 members' professional development and exposure to the tech industry

# CodePath: Internship Connection Program

· Completed tailored support program focused on application process, networking, and interview skills, connecting directly with top tech internships

#### CodePath: Intermediate Technical Interview Prep

· Enhanced algorithmic proficiency through intensive training, including hands-on coding challenges, mock interviews, and industry networking.

#### Certificates

## AWS Cloud Technical Essentials

• Completed a 4-week foundational course on AWS, focusing on cloud computing basics, AWS services, and architecture