# VARUN ARAVAPALLI

New York, NY | 732-773-5759 | va2056@nyu.edu | Linkedin.com/in/varunaravapalli | github.com/Varun07290

#### **EDUCATION**

#### **New York University, Tandon School of Engineering**

**May 2024** 

#### **B.S Computer Science, Math**

**Coursework:** Algorithms (Graduate), Blockchain and DLT, Operating Systems, Databases, Data Science II, C++, Java **Organizations:** NYU Blockchain and Fintech (Senior Advisor, Prev. VP of DEV), NYU Data Science Club, NYU Future Labs

#### WORK EXPERIENCE

## **Balyasny Asset Management | Investment Data Analyst Summer Associate**

May 2024 - Aug 2024

• Incoming Summer 2024 (Data Intelligence Group)

# **Barclays | Software Engineering Intern**

Jun 2023 - Aug 2023

- Developed an advanced **Python** script utilizing **Pandas**, and **SQLAlchemy** to optimize equities CASH desk information request queries and integrated real-time day orders via RESTful APIs to increase efficiency by 7%.
- Identified and addressed critical issues pertaining to **canceled order slices reverting to the trading desk**; leveraged **Kibana** and Python for data-driven actionable insights for 3 Financial Exchanges.

#### Numina | Data Science Intern

Jan 2023 - May 2023

- Built a Python based data ingestion service that continuously pulls an **AWS s3** instance to convert a real time image stream to multiple 1-min video sequences used for prediction and analysis
- Developed a **computer vision tool** to perform entity detection of a real time video of traffic camera footage in NYC, and compiled and analyzed accuracy statistics of over 500 video sequences using **pandas** and **geopandas**

#### **Highlyte AI | Data Science Intern**

May 2022 - Aug 2022

- Developed a novel **YOLOv5-based object detection system** for product platform "Highlyte" to detect whether images, videos and captions are compliant with cannabis advertising regulations
- Built a deep **CNN image classifier** to increase image detection accuracy for at-risk images, with a test mAP@0.5 of 76% with no false positives

## RESEARCH & LEADERSHIP EXPERIENCE

#### **Blockchain Research | Undergraduate Researcher**

Jan 2024 - Present

• Conducting in-depth analysis and synthesis of prevailing **Consensus Mechanisms** within blockchain technology supervised by Professor Ayesha Kiani.

#### **Computational Geometry Research | Undergraduate Researcher**

Aug 2023 - Jan 2024

- Analyze the **Optimal Slope Selection** Problem supervised by Professor Boris Aronov in Computational Geometry
- Created a literature survey to trace the development of the optimal algorithm and variants by comparing pertinent research papers, create a brief survey of results and **visualization** for the most optimal versions of the algorithm

## NYU Blockchain and Fintech | VP of Development

Apr 2023 - Present

- Led a team of 10 to create an **Poker dApp** leveraging Coinbase **Base L2** chain. Allows players to stake **USDC** for buy-ins, using **state channels** and **client-side shuffling** for a nearly server-less poker experience
- Designed and launched an NFT collection leveraging DALL-E and deployed on Polygon Mainnet, coupled with an ERC-20 token to establish a fully operational DAO for NYU Blockchain.

#### New York University | CS-2413 (Design and Development of Algorithms) Teaching Assistant Jan 2024 - Present

• Conducted weekly office hours, graded assignments and exams and worked with professor to adjust course material

#### **SKILLS**

Languages | Python, C/C++, SQL, JavaScript, HTML, CSS, R, Solidity, Bash
Tools | AWS, RestAPIs, Kibana, Jira, Confluence, Linux/UNIX Scripting, Git, MySQL, Docker, Kubernetes
Frameworks | pandas, NumPy, matplotlib, SKLearn, TensorFlow, PyTest, Flask, SQLAlchemy, Truffle, web3.js, next.js
Interests | Poker, Board Games, Basketball, Tennis, E-Sports, Dogs