# RUCHIR ADENWALA

Computer Science + Statistics || Quantitative Econometrics

ruchir.adenwala@gmail.com

214.734.2243

www.linkedin.com/in/ruchir-adenwala

#### **EDUCATION**

University of Illinois Urbana Champaign, B.S in CS + Statistics || Quantitative Econ, GPA 3.96

December 2025

• <u>Relevant Course Work</u> (Completed by Summer 2025): Data Structures, Computer Architecture, Statistics II, Statistical Modeling I, Computational Linear Algebra, Economic Statistics II, Numerical Methods I, Algorithms and Models of Computation

### WORK EXPERIENCE

# **London Stock Exchange Group** – *Post Trade Analyst*

June 2024 - August 2024

- Developed a Python database handler package enabling non-technical analysts to seamlessly interact with Snowflake, Oracle, and Toad. Optimized query performance, reducing runtime on VDI from 5 minutes to 28 seconds using batching techniques
- Implemented an LSM linear regression curve fitting algorithm using scikit-learn, which improved market data matching accuracy by 12.3% and reduced the average number of data points analysts review during their BAU process by 214 points
- Ran initial margin calculation simulations on the new margin model by pulling LCH APIs into python and using SQL queries through SnowFlake, and presented the data during client onboarding calls for the upcoming FMX exchange

GENI – Co-founder October 2023 - Present

- Engineered PRISMA schemas and OpenAPI endpoints that significantly enhanced the efficiency of server requests and increased request capacities by 23%, leading to faster response times and more robust server performance
- Initiated and oversaw the learning management system project, currently enhancing learning for over 150 students
- Led the development of an advanced machine learning algorithm to forecast students' educational progress, resulting in a 25% increase in targeted interventions and a 30% boost in student retention rates

### **Square Kettle** – *Options & Futures Trading Intern*

August 2024 - Present

- Shadowing a senior trader on the Options & Futures desk, managing a limited portfolio with a focus on both discretionary and algorithmic trading strategies, achieving a 3-5% weekly return through strategic options positioning and futures contracts
- Collaborating with analysts to develop an algorithm that increased trade efficiency by 15%, integrating macroeconomic data analysis (e.g., GDP, inflation reports) into both discretionary and automated trading strategies to optimize timing
- Gained hands-on experience in analyzing macroeconomic indicators, contributing to a 20% improvement in market entry/exit precision by identifying key trends in economic releases and integrating them into the portfolio's trading strategy

#### **EXTRACURRICULARS**

Illini Blockchain – Algorithmic Trader and Developer

September 2023 – May 2024

- Developed and optimized a Python algorithm utilizing Elliot Wave theory and mean reversion with asset fitting, resulting in 54% accurate trading signals when back tested on low liquidity or high liquidity crypto assets
- Utilized NumPy and Pandas to process data through the Alpaca API, developing a back-testing tool for easy data analysis and visualization to tailor to allow better fitting through enabling and disabling specific micro indicators

# Illini Consulting Group – Tech Consultant

September 2023 – May 2024

- Designed user-centric app interfaces using intuitive design principles, resulting in improved user engagement and satisfaction. This led to a noticeable decrease in user frustration and a more seamless experience
- Developed tech solutions with responsive design, RESTful APIs, and SQL/NoSQL databases, aligning with market trends and client needs, ultimately enhancing the effectiveness and scalability of the solutions provided.

### TECHNICAL SKILLS

Languages: Python, Java, C/C++, C#, Kotlin, JavaScript, HTML/CSS, UI/UX, Swift, SQL

Technologies / Frameworks: Linux, Windows, Mac OS, Docker, Node.js, Pandas, NumPy, Alpaca, GitHub

#### **EXTRA**

Awards and Honors: 35 ACT, DECA International Career Development Conference (ICDC) 3rd Place, USACO Gold