

# ZARA NIP

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## University of Chicago

**Expected Graduation: May 2026**

*Bachelor's of Science in Computer Science and Business Economics*

*Chicago, IL*

GPA: 4.0 / 4.0. Financial Markets Program Scholar for quantitative finance acumen and coursework at UChicago Booth School of Business.

## Experience

### Incoming Quantitative Risk Manager Analyst, Portfolio Management

**Jul 2024 – Aug 2024**

*PIMCO*

*Newport Beach, CA*

### Incoming Summer Intensive Program (SIP) Scholar

**Jun 2024**

*Girls Who Invest*

*Philadelphia, PA*

- Accepted into highly selective, rigorous 4-week training and 7-week internship program focused on core finance and investment concepts and skills taught by leading business school professors and investment professionals.
- Coursework and case studies includes accounting, valuation, financial modeling, Bloomberg Terminal, asset allocation, presentation and business etiquette skills.

### Portfolio Risk Intern

**May 2023 – Sep 2023**

*Rockland Trust Bank*

*Norwood, MA*

- Conducted scenario analysis using industry-standard Federal Reserve models and publicly available oceanographic EPA data to help bank manage a \$200m+ VAR (value at risk).
- Developed 3 models to demonstrate climate change risk using Alteryx, Python including linear and logistical regression.
- Presented statistics on loan collateral, impact to home and equity mortgage lines to 10+ member enterprise risk team.

### Undergraduate Research Volunteer

**May 2023 – Sep 2023**

*University of Massachusetts Amherst, Manning College of Information and Computer Science*

*Amherst, MA*

- Performed pilot study on privacy and ethics of AI in K-12 classrooms with literature review, national survey, MTurk.
- Presented statistical data of 200 respondents and identified sentiments of data collection, policy regulation of AI.

## Projects

### Bollinger Bands Trading Project | *Python, Pandas, NumPy, Scikit Learn, Matplotlib*

**Jan 2024 - Mar 2024**

- Developed a Bitcoin (BTC) trading strategy using Bollinger Bands, culminating in a total strategy return of 585.98% against 361.54% benchmark for quantitative finance Maroon Capital club winter project.
- Outperformed market with strategy success rate of 71.43% with emphasis on Python-based data modelling for risk management and predictive accuracy.
- Leveraged quantitative analysis and financial modeling using simple moving average (SMA), relative strength index (RSI), moving average convergence / divergence indicators (MACD), and buy / sell signals.

### RouteAble | *Python, Tensorflow, PyTorch, ErgoBlockchain, JavaScript, React Native*

**Nov 2023**

- Launched unique full-stack app to crowd-source images of inaccessible areas, including Blockchain stack in 36 hours.
- Implemented two ML models: object similarity and image detection models to identify unique images of stairs, ramps, guard rails. First and only app with embedded tag generation model for disabled users.
- Won "Most Impactful Award" at UChicago Winter Tech Showcase and "Best Use of Github Award" sponsored by Major League Hacking (MLH) for unique architecture.

## Technical Skills

**Languages:** Python, Java, R, Swift, HTML, CSS, JavaScript, LaTeX, SQL, C

**Developer Tools:** GitHub, Stata, Tableau, Alteryx, VS Code, Eclipse, JetBrains PyCharm, Bash

## Honors and Awards

**Diversity Awards:** SIG Trading Discovery Day, Morgan Stanley Early Insights, Jefferies Diversity Symposium, BNP Paribas Open Sophomore Summit, Citi Early Insights, JP Morgan Winning Women (2024), Barclays Diversity Day (2023).

**AnitaB.org Grace Hopper Conference Scholarship:** Selected for competitive, international scholarship. 2023.

## Leadership / Extracurricular

**Break Through Tech AI:** Selective, national program for minorities in AI. Sponsored by Citadel. Mar 2024 - Present.

**Junior Analyst, Paragon Global Investments:** UChicago chapter for algorithmic trading. Oct 2023 - Present.

**Member, Maroon Capital:** Active participant in quantitative finance investment club. Sep 2023 - Present.

**Member, Smart Women Securities:** Ambassador of national women-led finance investment club. Sep 2023 - Present.

## Interests

**Swimming:** UChicago Master's Swim Coach, Taiwan National U18 Championships; USA (NE, MA) swimmer 7 years.

**Music:** Trained in classical piano 14 years; jazz piano 5 years; 20+ band percussion 6 years; drum major 2 years.