

ADVIK CHAUDHARY

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EDUCATION

THE UNIVERSITY OF CHICAGO

B.A. Economics, B.S. Computer Science. Davis UWC Scholar.

Courses: Honors Microeconomics, Linear Algebra, Systems Programming III, Mechanics.

GPA: 3.85/4.00 Major GPA: 3.95/4.00

CHICAGO, IL

SEPT '23-DEC '26

UNITED WORLD COLLEGE OF SOUTHEAST ASIA (UWCSEA)

IB Diploma

GPA: 4.25/4.30 (Points: 44/45)

SINGAPORE

AUG '19-AUG '23

WORK & LEADERSHIP

MILLENNIUM MANAGEMENT *FICC, Trading Intern*

- [Developed](#) strategies & backtesting module (Python) for PMs, created \$70k PnL during testing.
- Strategies included: IMM rolls seasonal study, UST auction dates vs. yields, presented to PMs.
- Developed CTA-style systematic strategies (with variable positioning & drawdown management) and used genetic algorithms to routinely optimize parameters (in production).
- Created lightweight terminal-based app to display technical analysis and suggest trades.

SINGAPORE

AUG '24-OCT '24

BLUECREST CAPITAL *Macro Strategy, Summer Analyst (Unpaid)*

- Built [strategy](#) to identify trades by analyzing FX Options Vol market data and deriving implied correlations across currencies (app GUI in JavaScript/HTML/CSS with Python backend).
- Leveraged Bloomberg API for real-time data, Z-scores to detect deviations in implied vs. realized correlation, with automated email alerts, heatmaps, and charts.
- Optimized algorithm to handle 600+ currency pair combinations (G10 & Asian currency pairs).

SINGAPORE

JUN '21-AUG '21

PASSION TO SERVE *Non-Profit, Founder*

- Founded non-profit [organization](#) to tackle inequality in education and essential items, assisting over 6,500 beneficiaries.
- Built [team](#) of 150 volunteers, securing over \$100,000 in-kind funding, and partnerships with 8 NGOs and Singapore's Ministry of Manpower.

SINGAPORE

MAY '20-AUG '23

ACADEMIC ACTIVITIES

QUANT TRADING & EDGE ENTREPRENEURSHIP *Student Clubs*

Quant Trading: covered options, futures, ARMA, non-linear vol models (ARCH/GARCH).

Edge: lectures from CTA, software, and biotech founders. Pitched a college advising startup.

UNIV. OF CHICAGO

OCT '23-PRESENT

ELECTRON PARAMAGNETIC RESONANCE (EPR) SPECTROSCOPY *Researcher*

- Conducted EPR spectroscopy on DPPH and MnCl_2 to analyze electron structures, including measurements of resonant magnetic fields, g-factors, and hyperfine constants, increasing understanding of paramagnetic samples and EPR applications in quantum computing.
- Identified six hyperfine peaks for MnCl_2 , validating theoretical predictions & spin interactions.
- Worked with Prof. Petasis to [publish](#) findings in the Journal of Student Research (JSR).

SINGAPORE

SEP '22-OCT '22

QUANTUM COMPUTING (NATIONAL UNIVERSITY OF SINGAPORE) *Researcher*

- Developed and compared classical and quantum models for mean-variance portfolio optimization using IBM Q quantum computers, documented in working [paper](#), with Prof. Hua.
- Demonstrated the quantum model's superior performance, optimizing medium-sized stock portfolios (constant time vs. exponential), for scalable portfolio management.

SINGAPORE

OCT '22-JAN '23

AWARDS

GOLD AWARD RECIPIENT *National Youth Achievement Award (NYAA)*

Selected as one of 30 awardees in Singapore, between 16 and 30 years of age. Awarded by Mr Heng Swee Keat, Deputy Prime Minister of Singapore for non-profit work, among other activities.

SINGAPORE

JUL '22

SKILLS: Python, C, R, SQL, Bloomberg API, Qiskit (Quantum), Backtesting, Technical Analysis, Excel