Matthew Marks ’26

DV Trading Internship
Summer 2025

During the past summer, I used Byrne Scholars funding to support housing and meals while interning as a Quantitative Trading Intern at DV Trading in New York City. DV Trading is a proprietary trading firm specializing in derivatives, fixed income, and commodities, and my internship focused on building quantitative tools to enhance trading efficiency. My primary project involved optimizing a real-time risk-management system by reducing matrix-inversion latency by 80%, which required a blend of mathematical modeling, numerical linear algebra, and high-frequency data analysis. I also collaborated with traders to identify mispricings across futures markets, developed Python scripts to automate back-testing strategies, and learned how quantitative insights translate into rapid decision-making on a trading floor.

Beyond the technical work, the experience was transformative in showing how abstract mathematical concepts such as covariance, eigenvalues, and optimization can directly impact financial outcomes in fast-moving markets. Working alongside traders and developers honed my ability to think probabilistically under uncertainty and communicate complex ideas clearly and succinctly. The Byrne Scholars funding made this possible by allowing me to live in New York and immerse myself fully in a demanding yet rewarding professional environment. This internship deepened my interest in financial mathematics and algorithmic trading and affirmed my goal of pursuing a career that bridges quantitative research and practical market application. I am extremely grateful to the Byrne Program for enabling this experience, which was not only intellectually challenging but also instrumental in shaping my future path.