

Introduction

Mark Hendricks

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FINM 25000: Quant Portfolio Mgmt and Algo Trading

Your motive

- ▶ Exploration: Considering a career in quant finance.
- ▶ Leveling up: Already pursuing a career in finance, and want to level up.
- ▶ Future degree: Preparing for the Master in Financial Math



Why this class?

- ▶ Foundations of quant finance
- ▶ Cutting-edge tools
- ▶ Focus on application



Tools

- ▶ MV Optimization
- ▶ LASSO techniques for model selection.
- ▶ Parametric and non-parametric estimation
- ▶ Dimension reduction
- ▶ No-arbitrage pricing
- ▶ Forecasting



Quant Finance

- ▶ Know the market
- ▶ Model it mathematically
- ▶ Estimate it statistically
- ▶ Implement it computationally
- ▶ Communicate your results



Career areas

- ▶ Investment allocation
- ▶ Risk management
- ▶ Trading
- ▶ Computational finance



Career Development

Two info sessions offered in the course:

- ▶ Careers in Quant Finance - led by Financial Math Career Development staff.
- ▶ Master in Financial Math - led by Master Program staff and faculty.



Who am I?

Mark Hendricks

- ▶ Taught in the Master program for 10+ years.
- ▶ Deputy Director of the program.
- ▶ Quant research and implementation for hedge funds.
- ▶ Consulting and training for large trading firms.



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