Abhi Wadhwa

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Education

University of Southern California May 2027

B.A. Applied Mathematics, **Minor in Finance**, **M.A. Applied Mathematics** **3.8/4.0 GPA**

Relevant Coursework: Calculus 3, DiffEQs (Partial + Ordinary), Analysis (Real + Complex), Abstract Linear Algebra Abstract Algebra, Probability Theory, Graduate Probability (Markov Chains, Martingales, Stochastics), Optimization, Measure

Work Experience

The World Bank **Oct. 2024 - Feb. 2025**
Data Engineering Intern *Los Angeles, CA*

- Engineered R scripts to clean and standardize 30k+ data points spanning 20 years of yields for data analysis
- Developed model to align disjointed datasets from 150 districts with varying boundaries improving accuracy
- Constructed ETL pipelines for additional warehousing on data for deeper drawn insights from additional think-tank data

RBC Capital Markets **Sept. 2024 - Feb. 2025**
Capital Markets Apprentice *New York City, NY*

- Conducted valuation analyses and pitched NVDA/TSLA positions, generating 4% alpha above beta estimates
- Scored highest in cohort of 40 on time-intensive operating model competition under guidance from M&A
- Built Python algorithms for automated rate/yield data retrieval and dynamic position adjustments

USC Mathematics Department **Sept. 2024 - Dec. 2024**
ML Researcher *Los Angeles, CA*

- Studied *Measure Theory and Fine Properties of Functions* by Evans under mentorship by Graduate mentor
- Developed filtration processes using stochastic drift theory for modeling information flow in financial time series
- Constructed prediction algorithms incorporating measure-theoretic foundations for optimization and risk assessment

USC Marshall School of Business **Aug. 2024 - Oct. 2024**
Research Assistant *Los Angeles, CA*

- Engineered ETL pipeline that automated data validation, imputation, and normalization for 200k+ points
- Standardized data from 120 districts, propensity scoring public programs like SNAP/TANF/Medicaid on poverty metrics

Projects & Activities

Trojan Debate Society

- USC's #5 debater chosen as freshman to compete. Placed Top 10 Team/Speakers for division at all tournaments
- Researched and wrote matter files on Economics, Political Science, Finance, and lectured 200+ pages of arguments and data to new members for preparation for tournaments

Fixed Income Modeling Templates

- Created Excel pricing templates with adjustable assumption parameters for structured products including Sequential CMOs, CLOs, tranched restructuring waterfalls, and convertible bonds utilizing Black-Scholes option pricing methodology

Pairs Regression Calculator

- Takes upto 10 inputs, parses Bloomberg for Data, identifies strongest correlations for pairs strats; used to test hypotheses in discretionary strats

Credit Report on Gray Media (GTN)

- Identified HY opportunities based on credit analysis under Prof. Steve Moyer. Waterfall based on Discounted Cash Flow

Financial Budgeting Tool

- Coded in Dart, created financial planning tool for low-income workers, focused on milestone expenses and discounting future costs of retirement annuities to identify monthly saving requirement

Awards and Recognition

USA Mathematical Olympiad + 2x AIME

- Qualified for AIME 2x based on AMC (Top 3,000/300,000), crossed USAMO threshold 1x (Top 300)

British Mathematical Olympiad Bronze + 2x BMO Honors

- Qualified for British Maths Olympiad R1 2x based on UKMT (Top 1,000/700,000) + 1x Distinction (Top 250)

British Parliamentary Debate Awards

- 5th Novice in North America (NAUDC), 2nd Novice at Hart House, 7th Open at Berkeley, 3rd Novice at USC

Other Awards

- Johns Hopkins University' Center for Talented Youth Julian C. Stanley Study of Exceptional Talent, Dean's Merit Scholarship ($65k), Dean's List (All Semesters), Team UAE Debate Squad (Development Team)