Neal A. Agarwal

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EDUCATION

Northwestern University Evanston, IL

Major: Statistics

2020 - 2024

- Course Highlights: Regression Analysis, Advanced Regression, Times Series Analysis, Information Management, Python for Data Science I & II
- Achievements: NSAA State Tennis Champion Individual and Team, Nebraska All State Tennis Team

RELEVANT EXPERIENCE

Wells Fargo Securities Charlotte, NC

Interest Rate Swaps/Options Trader

July 2024

• Analyst on the Interest Rate Derivatives Desk, learning options theory, swaps, and forward price mechanics

Fixed Income Trading Intern

June 2023- August 2023

- Structured Products Group: created and presented a CLO pricing tool that forecasts discount margin (from attach, detach, EORP, MVOC) within 9 bps of accuracy
- Pitched relative value between different AAA CLOs with different discount margin, manager, principal paydown, and coupon payments
- Rates Trading: used the firms PCA model to analyze the yield curve and analyze different sectors as rich or cheap. Identified new methods to predict 15-year swap rates and efficiently bucket swaps for hedging, specifically looked at rolling windows
- Shadowed and learned about interest rate swaps, swaptions, caps, floors, and some exotic products

Akuna Capital Chicago, IL

Weeklong Course

Jan 2023

- Selected to participate in Akuna's options 201 trading course which included desk shadowing, quizzes, options theory
- Topics include financial data analysis, historical/implied vol, vol and outright options, and vol curves: term structure and skew

Morgan Stanley Chicago, IL

Private Wealth Management Intern

June 2022-August 2022

- Discussed asset allocations with corporate client team and alternative investment team to achieve at least 5% return
- Analyzed coupons, cash flow, and compounded yield on municipal, corporate, and treasury bonds on Excel, updated Salesforce to reflect client's redeemable and future purchases of bonds

LEADERSHIP EXPERIENCE

Tennis4All Omaha, NE

Founder & Head Coach

July 2019 – August 2021

- Founded a tennis coaching program which empowers neurodiverse participants to reach tournament readiness through individualized tennis lessons and camps; responsible for placing seven students at top three at local tournaments
- Created invoices in Sophia, spreadsheets in Excel, and performed reconciliations in accounting software to manage finances
- Calculated end of quarter metrics: revenue, net income, total new clients; focus on decreasing capital and rental costs

PROJECTS

Analyzing Poverty Rates in the US

September 2022 – December 2022

• Researched poverty rates in the context of 5 predictor variables, created heatmaps, bar plots, scatter plots, and more to show meaningful relationships and drive conclusions based off simple linear regression and visual analysis

Predicting Future NBA Superstars

January 2023 – March 2023

- Examined historical NCAA point guard data to predict NBA rookie's points per game and rank draft picks for "best value"
- Utilized exploratory data analysis to find relationships between variables, best subset selection to find best predictors and different linear regression models (MLR) to develop model with low mean squared error

ADDITIONAL SKILLS & INTERESTS

Skills: Microsoft Office, Sophia, Salesforce, R(regression analysis), Python (Pandas, seaborn, matplotlib, stats models), SQL(basic) **Language:** Hindi (Fluent), Urdu (advanced), Kashmiri (Intermediate), Spanish (Learning)

Extracurriculars: Balkans Club, CodeID, Powerlifting Club, South Asian Student Alliance, Varsity Tutor

Interests: Collegiate and Professional Basketball, Carrom Board, Cooking, Cricket, Football, Skiing, Tennis, Ultimate Frisbee