

# Vikram Oddiraju

[vikramoddiraju@gmail.com](mailto:vikramoddiraju@gmail.com) | (765)-667-3442 | [linkedin.com/in/vikram-oddiraju](https://www.linkedin.com/in/vikram-oddiraju) | [substack.com/@vikramoddiraju](https://substack.com/@vikramoddiraju)

## EDUCATION

**Purdue University**  
**BS in Computer Science**

West Lafayette, IN | May 2025

GPA: 3.41 / 4.00

**Minors:** Economics & Mathematics

### Relevant Coursework:

Data Mining & Machine Learning, Numerical Methods, Operating Systems, Computer Networks, Corporate Finance, Intermediate Macroeconomics, Money & Banking, Linear Algebra, Probability

### Computer-based Tools:

Python, R, S&P Capital IQ, Bloomberg Terminal, Excel/VBA, C/C++, MATLAB, PowerPoint

## WORK EXPERIENCE

**Old National Bank-1834** | Equity Research Intern (Wealth Management)  
Indianapolis, IN

June 2024 – August 2024

- Covered **analog & mixed signal semiconductor industry** - MCHP, ADI, TXN, STM, QRVO, SWKS, and MTSI
- Created a **quantitative screener in Python** using a combination of **Bloomberg API and SEC filings data** (Huber regression on ROIC – WACC relative to EV/IC)
- Contributed to weekly meetings involving **macroeconomic, industry, and specific equities' outlooks** with ER team
- Utilized **VBA automations** primarily for financial statement formatting in corporate valuations
- Offered a **divestment thesis** on Microchip Technology held in **core strategy** (FV estimate at \$70 on 08/2024)

## CLUB AND COMPETITION EXPERIENCE

**Investment & Trading at Purdue (ITP)** | Analyst

August 2021 – December 2021

- Performed DCF valuations and learned how future free cash flows impact NPV and IRR
- Presented semester long research on Eli Lilly, following the format of a **CFA research competition** project, to business school faculty (included DCF, SWOT, and ESG analysis on the company)

**Purdue Federal Credit Union (PFCU) Case Competition** | Solo Winner

December 2023

- Took the role of a **credit underwriter** and determined that a hypothetical company, Anvil Inc., should not receive a \$6.26 million loan from a financial intermediary due to poor financial ratios (**debt-equity, CCR, and DSCR**)
- Completed **pro-forma financial statements** with predicted best/worst case 5 and 10-year interest rates for loan amortization scheduling
- **Beat out 50 other teams** with presentation to CEO and credit analysts at PFCU

## RELEVANT PROJECTS

### Portfolio Management through Machine Learning (Python)

- Built a **reinforcement learning agent** to solve very large systems of equations (comprised of >1000 assets) that yield an optimal asset allocation for portfolio managers to use
- **Outperformed** traditional non-PPO based FGMRES **by a factor of 4** in terms of iterations performed
- Utilized **Stable Baseline 3's** library in **Python** for creation of custom environment, agent learning, and evaluation

### CAPM in Practice (R)

- Used **ggplot and quantmod** libraries in **R** to observe cumulative excess returns of JP Morgan Chase, Duke Energy, and the S&P 500 relative to a risk-free rate over a 5-year **time series**
- Performed **linear regressions** of asset returns relative to market returns and was able to get **alpha** and **beta** of each asset using dplyr library
- Measured **statistical significance** of each alpha using **p-tests** and each beta using **95% confidence intervals**
- Analyzed the **r-squared** of each asset to explain **systematic** and **idiosyncratic** shocks to each asset's returns

### Linear Regression - QR Decomposition vs. Gradient Descent Evaluation (C++)

- **Regression analysis** on Boston Housing dataset (distance to Boston employment centers vs. median value of homes)
- From my testing, linear regression using **QR decomposition** ran 84 times faster than **gradient descent**