

# Aditya Dhanraj

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## EDUCATION

### University of Texas at Austin

Bachelor of Science in Computer Science

Austin, TX

May 2028

- SAT: 1580 | Walnut Grove High School's Inaugural Salutatorian (4.0 GPA)
- UFA (Investment Associate), UTexas Energy (Commodities Prep Member), ML & Data Science, UTPC, ACM, ABSA
- Prob. & Stats., LinAlg, Multivariable & Vector Calculus, Microeconomics, Software Engineering, Cloud Computing

## 2025 INVITE-ONLY EARLY TALENT & INSIGHT PROGRAMS

- |   |   |
|---|---|
| • Citadel – The Fixed Income & Macro Challenge (NY)     | • UBS – Tomorrow's Talent Equity Research Insights Day (NY) |
| • Walmart – Spring Sophomore Summit: SWE II Intern (AR) | • ServiceNow – Discover Program – Engineering (CA)          |
| • Susquehanna Intl. Group – First-Year Discovery Day    | • Bain & Co. – Consulting Kickstart                         |
| • Point72 – Academy Spring Sessions                     | • J.P. Morgan – Virtual Freshman Focus                      |
| • Goldman Sachs – Virtual Insight Series                | • Stout – Future Leaders in Finance                         |

## EXPERIENCE

### Founding Engineer

July 2025 – Present

Xsauce Inc. — *Node.js, TypeScript, Python, AWS, Docker, Redis, DynamoDB, Express, Prometheus* Remote

- Leading backend development and infrastructure for Wage, a pre-launch gaming platform expanding market access for younger generations, including REST API design, microservice and pipeline management, and core product features

### Investment Associate

Sept. 2024 – Oct. 2025

University Finance Association — *Market Research, Equities, Valuation, Accounting, Excel* Austin, TX

- Directed the Generalist Industry Group in following market developments and building stock pitches, while also mentoring three junior analysts and providing guidance on financial modeling, accounting, and valuation principles

### Undergraduate Research Assistant

Jan. 2025 – July 2025

UT Austin — *Python, Statistical Modeling, NumPy, Pandas, Time-Series, Bloomberg Terminal* Austin, TX

- Analyzed daily time-series data for over 80 indices, developed a VIX Term Structure, and built a commodities forecasting model in Python to forecast price movements and model market volatility alongside Dr. Travis Johnson

### Equity Research Analyst Intern

Oct. 2024 – Dec. 2024

Westlake Securities — *Market Research, Equities, Valuation, Accounting, Excel* Austin, TX

- Produced in-depth equity research reports on Walmart (WMT) and Atmos Energy (ATO), including company valuations and detailed market and industry analyses, alongside Westlake Securities' investment banking team

## PROJECTS

### Financial Market Monitor — *Market Research, Macro, Equities, Fixed Income, Forex*

Sept. 2024 – Present

- Composing periodic market reports on global economic conditions, earnings reports, significant mergers/acquisitions, etc. for over 600 readers, including college students and finance professionals, worldwide

### EchoAlpha — *Python, NumPy, Pandas, NLTK, BeautifulSoup, Market Research, Equities*

July 2025 – Aug. 2025

- Constructed a systematic trading pipeline to parse inconsistent SEC 10-Q filings using BeautifulSoup, extract NLP-based sentiment from MD&A sections with VADER, and refine classification via polarity ratios and risk proxies
- Backtested contrarian long/short equity signals with configurable entry lags, holding periods, and transaction cost assumptions (current configurations yield Sharpe ratios up to 0.51 and 67% win rate)

### MacroDynamix — *Python, ML, Statistical Modeling, Time-Series, Macro, Market Research*

Apr. 2025 – Sept. 2025

- Engineered a modular data pipeline to process 120+ monthly macro indicators (1959 - Present) from FRED
- Developed a regime classification framework to model asset allocation under distinct macro environments and a stacked ensemble regression model to forecast S&P 500 monthly returns (up to 78% R<sup>2</sup>, 87.7% directional accuracy)

## SKILLS & INTERESTS

**Finance:** Market Research, Macro, Trading, Equities, Valuation, Fixed Income, Commodities, Options, Bloomberg

**Computer Science:** Python, R, C, Machine Learning, NLP, NumPy, Pandas, PySpark, TensorFlow, Hadoop, SKLearn, XGBoost, CatBoost, Random Forest, Java, TypeScript, AWS, DynamoDB, Docker, Linux, Mathematica, BeautifulSoup

**Mathematics:** Time-Series Analysis, Statistical Modeling, Probability & Statistics, Linear Algebra, Stochastic Processes

**Other:** Spanish, Hindi, Piano (15 Years, 5x National Winner), Football (15 Years), Poker, Chess, ANSYS, AutoCAD