PIYUSH SEN

+1.447.902.6585 | piyush2@illinois.edu | Champaign, Illinois | linkedin.com/in/piyush-sen-bb645151/

EDUCATION

University of Illinois at Urbana-Champaign   *Aug 2024 - Dec 2025*
M.S. in Financial Engineering
- Relevant Coursework: Machine learning in finance, Financial computing, Statistical methods in finance

Xavier Institute of Management, Bhubaneswar, India   *Jun 2013 - Mar 2015*
MBA, Finance

St. Stephen's College, Delhi, India   *Jun 2006 - Apr 2009*
B.Sc. (Hons.), Physics

SKILLS

Programming/database: Python, C++, R, SQL, Gurobi, Bloomberg, CapitalIQ, Factset, Microsoft Excel
Functional: Quantitative Finance, Quantitative modeling, portfolio management, valuing traded equities, quantitative finance, financial markets, derivatives pricing, business strategy, bridging analysis, asset pricing,
Certifications: Cleared CFA Level 1, Registered Valuer in Securities and Financial Assets (IBBI), Complete Linear Algebra: theory and implementation in code (Udemy), R Programming (Coursera)
Coursework: Valuation, Risk management, Probability theory, Asset liability management, Applied Mathematics
People: Efficient problem solving, adaptability, client communication, team management, independent research

PROJECTS

Quant Finance project, Option pricing using Monte Carlo simulation   *Jun 2024*
- Used Geometric Brownian Motion to simulate stock prices and value European options
- Used Monte Carlo & Quantlib library to value American options and used antithetic variates to improve variance

World Quant University, Applied Data Science Lab   *Apr 2024 - Present*
- Organized and imported data using Python data structures, data wrangling using pandas library, created data visualizations, and examined correlation between Mexico house prices and property size/location
- Created a machine learning model using scikit-learn, build a data pipeline for imputing and encoding features, and improved model performance by reducing overfitting

PROFESSIONAL EXPERIENCE

Acuity Knowledge Partners (formerly known as Moody's Analytics)   **Gurugram, India**
Delivery Manager, Private Equity   *Oct 2021 - Dec 2023*
- Contributed to comprehensive portfolio monitoring and investment research for a $100M portfolio of investee companies for corporate accounts, including financial modeling, trading trends and fundamental valuation
- Headed project related to analysis of the liquidity discount of private companies using the Black-Scholes model, and deriving market multiples for listed companies using linear regression on key financial variables

Samaira Investment Advisors ('Mylen India Growth Fund')   **Delhi, India**
Analyst, Public Equity   *Apr 2018 - Jun 2021*
- Managed a $25M equity portfolio in the Indian secondary markets (banks and technology stocks), doing quantitative analysis of current markets and generate investment strategies to generate returns
- Spearheaded a hedging initiative for an equity portfolio using put options, developing a strategic hedging plan to limit portfolio risk

ICRA Ltd (a Moody's Investor Services company)   **Gurugram, India**
Analyst   *May 2015 – Oct 2017*
- Built financial models to quantify the credit risk of corporates (debt of $2M-$350M) in residential and commercial mortgage sectors and provide a recommendation for a suitable credit rating
- Advised on key credit risks to the senior management and mitigating company specific risk through peer benchmarking and comparison with credit rating matrix