

The Berkeley MFE

Resume Book
Class of 2015-2016



Master of Financial Engineering Program
Haas School of Business, UC Berkeley

The Berkeley MFE

Master of Financial Engineering (MFE) Program

We are so pleased you are considering candidates from the Master of Financial Engineering Program at the Haas School of Business for full time opportunities at your company. We are confident you will be impressed by the UC Berkeley Financial Engineers.

The current class will be available for hire after graduation on March 18, 2016. Videoconferencing facilities are available for remote presentations and/or interviewing.

If you are interested in scheduling a time to visit the Haas campus at Berkeley and give a presentation to our students, or to simply interview candidates, please do not hesitate to contact us.

We look forward to working with you as you consider candidates from our program for opportunities at your firm.

Sincerely,



Linda Kreitzman
Executive Director
Master of Financial Engineering Program
Haas School of Business
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EDUCATION

University of California, Berkeley

Master of Financial Engineering

Berkeley, CA
March 2016

- **Relevant Coursework:** High Frequency Finance, Equity & Currency Markets, Optimization Models in Finance (Machine Learning and Convex Optimization), Empirical Methods in Finance (Time series analysis), Fixed Income Markets, Derivatives: Quantitative Methods
- **GPA:** 3.6/4.0

Los Andes University

MS in Industrial Engineering

Bogota, Colombia
June 2012

- **Thesis:** Backtesting VAR methods for options portfolios on the Colombian OTC FX market
- **Award:** Maximum possible grade achieved on Thesis 5.0 / 5.0
- **GPA:** 4.4 / 5

Los Andes University

BS in Industrial Engineering

Bogota, Colombia
December 2010

- **Award:** Alberto Magno Scholarship, granted to the top 10 entry grades per semester.

SKILLS & ACADEMIC PROJECTS

Programming: MATLAB, PYTHON, R, SQL, SAS, VBA, Berkeley's C++ Programming for Financial Engineers Course

Berkeley's Trading Competition: Won first place by building trading strategies in different cases including: options, algorithmic market making and commodities.

Applied Finance Project: Incorporating news analytics in risk modeling for efficient capital allocation on equity markets.

Statistical Arbitrage: Implementation and Backtesting of a pair trading strategy in Emerging Market's ETFs.

WORK EXPERIENCE

MunichRe Trading LLC

Fall Intern

The Woodlands, TX
Oct. 2015 – Dec. 2015

- Improved the weather and commodities derivatives quoting platform by testing different pricing models.
- Developed unit tests for the commodities and weather online quoting software, serving as a liaison between the Structuring department and the Sales department.

Banco de Bogotá

FX Options Trader, Sales Desk

Bogota, Colombia
Aug. 2012 – Feb. 2015

- Managed the USDCOP currency options portfolio: Incremented revenue by 100% in 2 years.
- Volatility market making: Active liquidity provider for corporates, onshore and offshore banks.
- Implemented various risk management tools to control different risks: smile Delta/ Gamma, Vega and Rho, using finite difference approximation.
- Developed VBA calculators for the sales team to price option structures for corporate and institutional clients, improving the quoting process.

Statistical Analyst for Market Risk, Market Risk Department

Nov. 2010 – Jul. 2012

- Implemented and backtested different VAR methods for the FX option's portfolio with Matlab, including: Weighted Historical Simulation, Montecarlo Simulation and RiskMetrics' Delta-Gamma.
- Produced P&L and risk reports for different desks.

Statistical Analyst for Credit Risk, Credit Risk Department

Jan. 2010 – Nov. 2010

- Machine Learning: Implemented logistic regression to assign default probabilities for corporate loans with SAS.
- Data Handling: Automated the process through which the bank granted massive consumer credits using SQL.

ADDITIONAL INFORMATION

Languages: English (fluent), Spanish (native)

Interests: Passion for soccer

SUBHAMOY BASU

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EDUCATION

Haas School of Business, University of California, Berkeley

3/15 to 3/16

Master of Financial Engineering

- **Applied Finance Project:** “Estimation of risk model of equity index returns for world equity markets by analyzing news data” (Team of 4)
- **Project on asset allocation by factor timing:** “Optimal asset allocation for hybrid equity and fixed-income portfolio using dynamic multi-factor return model ” (Team of 4)
- **Project for Citigroup:** “Yield Value of Individual Corporate Bond Liquidity” (Team of 5)
- Part of 6-student team selected to represent the Berkeley MFE in the International Association of Quantitative Finance (IAQF) case competition (01/16)

Indian Institute of Management, Kozhikode, India

7/05 to 3/07

Post Graduate Diploma in Management (Major in Finance)

R.V. College of Engineering, Bangalore, India

10/98 to 7/02

Bachelor of Engineering (Electrical & Electronics)

SKILLS SUMMARY

- Programming – R, Python, C++
- Extensive work experience in Structured Finance and Credit Risk Modeling
- Cleared 3 actuarial papers conducted by Institute of Actuaries of India – CT1 (Financial Mathematics), CT3 (Probability & Mathematical Statistics) & CT7 (Economics)

EXPERIENCE

BlackRock, San Francisco, USA

10/15 to 1/16

Intern (Risk & Quantitative Analysis: Multi-Asset Strategy Group)

- Applied principal component regression to analyze funds of ETFs and assess whether factor exposures of such portfolios are in line with investment objectives
- Implemented a model for determining factor shocks so as to maximize the loss for a given Mahalanobis distance. The results were used to calibrate models for stress testing of funds
- Analyzed and presented factor decomposition of fund performance to portfolio managers

ICRA Limited (A Subsidiary of Moody's Investors Service), Mumbai, India

05/07 to 1/15

Vice President (4/14 to 1/15), Assistant Vice President (4/10 to 3/14), Senior Analyst (5/07 to 3/10)

- Executed rating assignments on RMBS, CMBS, Covered Bond, Future Flow Securitization & Distressed Debt
- Developed PD, LGD and Prepayment models by analyzing large sets of loan level data
- Developed Monte Carlo simulation based rating models involving complex structural features such as credit & time tranches, over-collateralization, third party guarantee etc.
- Published research on asset quality of retail loan portfolios
- Carried out qualitative assessment of business, credit and legal risk through interaction with senior management of Issuers, due-diligence & site visits and vetting of legal documents
- Served as a Member of the Rating Committee at ICRA between Aug-2012 and Dec-2013; The Committee is responsible for assigning ratings to corporates, financial institutions & structured transactions

Infosys Technologies Limited, Bangalore, India

11/02 to 5/05

Software Engineer – ‘Finacle’ (Banking Software Package)

- Involved in the development of domestic and foreign currency fund transfer modules for ‘Finacle’

INTERESTS – Sudoku, Soccer

Daniel Ramiro Barrera

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EDUCATION

University of California, Berkeley – Haas School of Business	3/15 to 3/16
Master of Financial Engineering	
<ul style="list-style-type: none">• First place in the Annual Berkeley MFE Trading Competition• Independent Project: Backtesting pairs-trading strategy on emerging market ETF's• Independent Project: Detecting momentum signals with Machine Learning (Regression, SVM)	
University of Texas at Austin - McCombs School of Business	1/03 to 12/04
Master of Business Administration	
Monterrey Institute of Technology, ITESM	8/94 to 12/98
Bachelor of Science in Computer Science and Electrical Engineering	
Passed CFA Level II Exam	6/13
Passed Coursera online courses on Machine Learning, R and Computational Testing in Python	12/14

SKILLS SUMMARY

- **Financial Data** – Three years of markets data analysis and processing for top financial institutions
- **Software Development** – Python, Matlab, R, C++, Perl, SQL, VBA, bash, UNIX/Linux and Windows
- **Communication Skills** – Technical and financial presentations to senior executives and risk managers

EXPERIENCE

Moody's Analytics at San Francisco, CA	Quantitative Research Intern	10/15 to 1/16
MSCI Inc., Monterrey, Mexico		3/12 to 2/15
RiskMetrics Data Product Manager Sr. Associate		
<ul style="list-style-type: none">• Served risk managers in the top financial institutions by explaining jumps and variations in VaR of their multi-asset class portfolios and by setting up and ensuring automated delivery of market risk data• Solved market data production problems regarding data sourcing, processing, loading and presenting using Perl, Python, C++ and SQL, in Linux and Oracle (millions of daily records and high accuracy required)• Replicated in Excel, R and Matlab derivatives of implied volatility surfaces and options' Greeks, as well as Nelson-Siegel yield curves providing transparency on RiskMetrics computation methods of risk factors		
HEB International Supermarkets at Monterrey, Mexico		4/05 to 10/11
Business Development Manager and Pricing Manager		
<ul style="list-style-type: none">• Designed and developed large data software that predicted competitors prices based on historical trends and strategically recommended new prices for 40,000 products in 7 different geographic markets• Planned and started a new store format contributing ROI simulations, Financial Statement Analysis as well as Layout and Assortment selection based on sales trends and profit margins• Generated profitable strategies for 30 categories by analyzing elasticity of demand, competitors' prices, promotions, and seasonal market preferences, achieving increases in profits beyond budget		
Dell Inc. Computers at Round Rock, TX – Sales Data Analyst MBA Intern		6/04 to 8/04
Monterrey Tech - Strategic Software Center at Monterrey, Mexico		2/00 to 6/03
<ul style="list-style-type: none">• Designed and implemented system architecture and stress testing for WebTec, one of the first proprietary web platforms for collaborative learning growing it robust enough to support over 60,000 users		
Celestica Inc. - Electronic Systems Manufacturer at Monterrey, Mexico		2/99 to 2/00
Lead Electronic Test Developer		
<ul style="list-style-type: none">• Developed 10 electronic machines used in IBM production facilities at Scotland, Canada and United States		

INTERESTS - Mountain hiking, tough mudder events, grilling

PABLO A. BERTISCH

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US CITIZEN

EDUCATION & HONORS

UNIVERSITY OF CALIFORNIA, BERKELEY – HAAS SCHOOL OF BUSINESS

Master of Financial Engineering Candidate

GRE: Quantitative 170/170 (98th percentile)

BERKELEY, CA

March 2015 – March 2016

CFA INSTITUTE

Passed Level I CFA Exam

December 2014

FLORIDA STATE UNIVERSITY

Bachelor of Science | Major in Applied and Computational Mathematics | Minor in Physics

GPA: 3.7 – Cum Laude

Honors: Dean's List, Spring 2010 – Spring 2014

TALLAHASSEE, FL

June 2010 – May 2014

Relevant Coursework:

Multivariable Calculus

Mathematical Statistics

Macroeconomics

Linear Algebra

Mathematical Modeling

Microeconomics

Ordinary Differential Equations

Numerical Analysis

Partial Differential Equations

Complex Variables

EXPERIENCE

RISK MANAGEMENT INTERN

Arch Mortgage Insurance

WALNUT CREEK, CA

May 2014 – January 2015

- Test economic or loss forecasting models
- Support a housing economist with various research assignments, including analyzing economic conditions
- Identify and research the adoption of modeling and reporting techniques that represent best practices for pricing of mortgage insurance risk

PORTFOLIO ASSISTANT

Senna Lenders Corp

MIAMI, FL

May 2014 – January 2015

- Managed company accounting including outstanding loans, accounts payable and receivable
- Generated income forecasts for the lending group
- Researched equities and reported recommendations and analysis to the portfolio manager
- Proposed and implemented immersion in new lending opportunities that resulted in lower default rates and higher profits

TEACHING ASSISTANT

Varsity Tutoring

MIAMI, FL

August 2014 – January 2015

- Managed clients in need of assistance in various courses and standardized tests
- Utilized simple skills in order to simplify complex mathematical topics
- Focus on subjects: Linear Algebra, Ordinary Differential Equations, and the GRE Quantitative Section

SKILLS SUMMARY

- **Language skills:** Native in both English and Spanish
- **Programming:** C++, Matlab, Python
- **Professional Interests:** Equity research and analysis, portfolio management and optimization

EXTRACURRICULAR ACTIVITY & LEADERSHIP

VOLUNTEER TUTOR

Dirac Science Library

TALLAHASSEE, FL

December 2012 – May 2014

- Provided walk-in counseling and tutoring for other undergraduate students
- Organized events to provide tutoring to counter poor education in low-income areas

PROGRAM COORDINATOR

Jewish Community Center

MIAMI, FL

June 2012 – August 2012

- Controlled recreational activities for children and supervised several other coordinators
- Collaborated with occupational therapists within the community to ensure proper care for customers with mental or physical disabilities

Hobbies: Skiing, astronomy, college football, and playing soccer

Ganesh Bhandari

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EDUCATION

UNIVERSITY OF CALIFORNIA, BERKELEY

March 2015 - March 2016

Master of Financial Engineering Candidate

ENSAE PARISTECH

Master of Applied Mathematics

September 2011 - June 2014

Relevant coursework: microeconomics, probability theory, statistics, stochastic processes, time series, corporate finance, risk regulations

Teaching assistant for applied mathematics – second year undergraduate students, University Sorbonne (Paris 2)

SKILLS

- **Languages:** English (Fluent), French (Native), Hindi (Native)
- **Computing skills:** VBA, Bloomberg, R, C/C++, Matlab

WORK EXPERIENCE

Internship - Delta One Emerging Markets Trading, CREDIT SUISSE, Hong Kong

Oct. 2015 – Jan. 2016

Internship - Exotic Credit Trading, SOCIETE GENERALE CIB, London, UK

August 2014 - March 2015

- Priced a wide range of exotic credit derivatives: Correlation and non-correlation products (CLNs, Swaps on single names, FTDs on indices and tranches.)
- Managed risk on the primary trading book: computed and validated delta and gamma hedges and checked remaining lines with counterparties
- Pushed trading axes according to the needs of the desk (CLNs on Russian names for instance)
- Marked CDS curves for client needs (mainly names that were not traded by the flow side)
- P&L reconciliation: liaised with the middle office and validated trade's booking for the primary market
- Automatized pricing tools and reports generation (P&L, hedges)

Internship - Major Project Advisory at KPMG, Mumbai, India 2013

July 2013 – October

- Managed project costs by creating a quantitative tool in excel using Monte Carlo simulations taking into account risk and mitigation costs

Internship - ABS Trading at WYETREE ASSET MANAGEMENT, London, UK 2013

August 2012 – January

- Analyzed subprime's collaterals (severity, loan to performance, default, prepayment) for pricing securities
- Received requests from market operators (sales, brokers, traders) on Bloomberg and decided the quantity to buy/sell alongside the traders
- Booked trades using proprietary trading systems and checked P&L
- Wrote NAV reports intended for investors
- Organized BWICs (ABS auctions) in order to unwind trading books

Project in collaboration with GDF SUEZ TRADING, Paris, France

October 2013 – July 2014

- Studied and implemented electricity spot price models (mean reversing model, hidden factors model) used in derivatives pricing and risk management
- Compared the efficiency of both models using French and German data
- Created an index to predict gas prices movements

EXTRACURRICULAR ACTIVITIES

- Semiprofessional poker player: specialized in mid stakes cash games (NL200 up to NL600) with a main focus on live games
- High level badminton player (10+ years and many tournaments won)

Ronald Chan

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Citizenship: US Citizen || **Phone:** (626) 623 8996

EDUCATION

University of California, Berkeley – Haas School of Business

Master of Financial Engineering Candidate

- Industry Project (Citigroup): Sovereign Bond Risk Premium

Mar 2015 – Mar 2016

University of California, Berkeley

B.A. in Applied Mathematics (Concentration: Economics)
B.S. in Electrical Engineering and Computer Science

Aug 2006 – May 2010

CFA Institute

Level II Passed

SKILLS & BACKGROUND

- **Finance:** Over 2 years of quantitative trading and research hedge fund experience; passed CFA Level II
- **Self-starter:** Ability to perform independent research in both academic and professional settings and pitch revenue generating models and ideas
- **Software Development:** Over 4 years of professional experience programming in languages such as Java, R, PHP, Perl, Linux/UNIX, SQL
- **Effective Communication:** Ability to collaborate daily with people from various backgrounds and industries ranging from chief executives to traders to engineers

PROFESSIONAL EXPERIENCE

Millennium Management LLC

Oct 2015 – Jan 2016

Fall Intern, Global Macro Trading

- Work directly with portfolio manager and gain knowledge of research and trading in global currency, fixed income, equity, and commodity markets
- Build market data infrastructure and develop new trading strategies

University of California, Berkeley

July 2014 – June 2015

Visiting Student Researcher, Department of Economics

- Investigated alpha generation strategies that equalize risk contributions to understand the impact of their constructions on investment

Giamian Capital LLC

Dec 2011 – Dec 2013

Quantitative Trader, Research and Trading Group

- Collaborated with the CEO/Chief Investment Officer in an US equity quantitative algorithmic hedge fund
- Researched alpha generating statistical arbitrage models, ranging from short-term technical signals to long-term sentiment based strategies
- Responsible for full life cycle from research to live trade monitoring to performance analysis; experience including but not limited to:
 - Monitoring market trends and supporting continuous model research and development
 - Identifying areas for risk mitigation by deconstructing exposures using multifactor models

RockYou

May 2010 – Dec 2011

Senior Software Engineer

Goldman Sachs

June 2008 – Aug 2008, June 2009 – Aug 2009

Summer Intern

JULIEN CHANCEREAU

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EDUCATION

University of California, Berkeley - Haas School of Business

3/15 to 3/16

Master of Financial Engineering Candidate

Project: Forecast S&P 500 volatility using machine learning techniques.

ENSAE ParisTech, Paris, France

9/12 to 6/14

Master of Science in Applied Mathematics and Economics (dual degree with the MFE)

Bachelor of Science in Applied Mathematics and Economics

SKILLS SUMMARY

Finance – one year of quantitative analysis experience at a bank and a hedge fund.

Software Development – C++, VBA, Python, R, Matlab, SAS in Microsoft Windows & Linux environments.

Leadership/Communication Skills – team leader during academic projects, president of a student association.

Languages – Fluent in English, Native in French, Fluent in German, Spanish basics.

INDUSTRY EXPERIENCE

Blackrock, San Francisco, CA

10/15 to 1/16

Intern for Model Based Fixed Income Group

HSBC Bank Plc, London, UK

6/14 to 2/15

Analyst in the Corporate Equity Derivatives Trading

- Developed a jump-diffusion & empirical default model fitting tool in C++ & VBA on CDS pricing and MC.
- Developed a mutual fund volatility prediction tool based on MLR with an automated indicators selection algorithm in VBA.
- Created a moving spreadsheet for volatility capped funds strategies in VBA.
- Helped during day-to-day tasks, especially derivatives pricing (options structured products, collateralized loans).

Centre of Research in Econometrics and Statistics (CREST), Paris, FR

9/13 to 6/14

Year-long academic team project on Statistical Arbitrage and Pair Trading

- Worked on the definition of an optimal pairs trading strategy using Statistics and Econometrics.
- Used of R to compute stochastic processes, trading strategies and portfolio NAVs.

ENSAE ParisTech, Paris, FR

9/13 to 2/14

C++ academic team project, Database classification using artificial neural network

- Developed a Neural Network classification algorithm in C++ and running through a GUI based on Qt.

Used the OpenCV library to configure the multilayer perceptrons using an error backpropagation algorithm.

42 Capital, Paris, FR

7/13 to 9/14

Quantitative Analyst Intern

- Worked on an asset allocation strategy and defined several market regimes using machine learning algorithms in Python.
- Data analysis on Bloomberg series and modeling with Python 2.7 and numpy, pandas, matplotlib, scikit-learn.

INTERESTS

Electronic music, DJing, reading, and traveling.

GARIMA SINGH CHANDEL

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OBJECTIVE

Looking for a full-time quantitative investment position

EDUCATION

University of California, Berkeley - Haas School of Business

March 2015 – March 2016

Master of Financial Engineering Candidate

- GPA: **3.82/4.0**

- Projects:

- Citigroup Global Markets, NY- Group project on *Bond Liquidity and Credit Cycle Dependence*
- Analyzing **Google Trends data** to model and forecast macroeconomic indicators
- Monte Carlo simulation of wealth distributions for **asset-allocation** across liquid and illiquid asset classes

Indian Institute of Technology, Delhi

Bachelor of Technology in Engineering Physics

July 2010 – May 2014

- GPA: **8.80/10**

- Thesis: Developed a **Monte Carlo Simulation** of a light scattering model to design a *hybrid sensor*, with applications in the industry to measure purity of fluids

- Top 7% Academic Merit Award, received 6 times

SKILLS SUMMARY

- **Finance**
 - Bloomberg Aptitude Test (BAT) score **630 (97th percentile)**
 - NCFM certification in Financial Markets & Risk Management by National Stock Exchange, India
- **Programming** – Java, C++, MATLAB, R, MySQL, Python, JavaScript, Microsoft Office
- Excellent written and communication skills

EXPERIENCE

Echelon Asset Management

October 2015 – January 2016

Quantitative Research Intern

- Exposed to working on developing credit models, ABS cash flows and optimizing portfolio of illiquid assets

FinMechanics India Private Ltd, Mumbai, India

July 2014 – March 2015

Financial Consultant

- Consulted large corporate clients on management of retail foreign exchange business with non-banking dealers
- Delivered a comprehensive credit risk monitoring system for treasury management employing treasury software, SQL and Excel
- Developed JavaScript and Java based market limit monitoring platform for middle management of Indian banks
- Validated and compared pricing of interest rate swaps across softwares to recommend the best platform

Saha Institute of Nuclear Physics, Kolkata, India

May 2013 - July 2013

Summer Intern | Econophysics

- Applied Benford's Law to perform statistical analysis of equities data and inspect the relationship between χ^2 – value and Hurst Exponent
- Established market leading 'sector' across Indian stock index components using financial time series

INTERESTS

- Biking, literary Classics, traveling, Senior Diploma Holder in Kathak (Indian classical dance)

IOANNIS (YIANNIS) CHARDALOUPAS

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EDUCATION

University of California, Berkeley - Haas School of Business

03/15 - 03/16

Master of Financial Engineering Candidate

- Independent Study: Fast Fourier Transformations in Options Pricing

- Group Projects:

- 1) Development of Investment Scoring Model for Startups using Machine Learning techniques
- 2) Forecasting Stock Markets with Machine Learning Techniques

National Technical University of Athens (N.T.U.A.), Athens, Greece

11/07-11/12

Diploma in Civil Engineering (Structural Engineering) – GPA: 8.24/10. Ranked top 9%

- Developed stochastic optimization algorithm in Matlab, achieving 91.7% reduction

SPECIALIZATIONS

R-Programming

12/14

John's Hopkins University, Coursera Course – Achieved high distinction

Computational Investing Part I

Georgia Institute of Technology, Coursera Course – Achieved high distinction

Machine Learning

09/14

Stanford University, Coursera Course – Achieved high distinction

Python

07/14

MIT, EDX Course, Rice University, Coursera Course

American College of Greece(DEREE)

09/13 - 05/14

Concentration in Finance – GPA 3.82/4.0

SKILLS

C++, Python, Matlab, Octave, R, LaTex, Mac OS

Languages: English (Proficient User, CPE Cambridge University), Greek (Native Speaker),

French (moderate, DELF B2)

WORK EXPERIENCE

Goldman Sachs, New York, USA

10/15-01/16

- MRMA Derivatives Analysis Group Intern

MathAidGreece, Athens, Greece

09/13-03/15

- Founder of the educational startup MathAidGreece that offers pro bono online help in

mathematics to underprivileged Greek students

P. Carydis & Partners, Athens, Greece

05/09 - 11/12

- Structural Engineering Intern at an engineering consulting firm
- Earthquake resistant design of new structures, for hotel in Athens and the retrofit of existing buildings
- Developed software in Python to check of existing structures under dynamic loading
- Acknowledged for the contribution to the publication of 3 scientific papers supervised by NTUA PE P. Carydis

PRIZES – SCHOLARSHIPS

Price Waterhouse Coopers Scholarship

09/14

Angelopoulos - Clinton Global Initiative University (CGIU) 2014

05/14

National Technical University of Athens Mathematics Contest - 1st Prize

04/08

National Olympiad of Mathematics – Silver medal

02/07

INTERESTS

Mathematics, Geometry, Poetry, Travelling

Sports: Avid windsurfer, Taekwondo (2nd DAN black belt), Motorized sports (1st prize in go-kart NTUA competition)

Mingye Chen
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Education

University of California, Berkeley – Haas School of Business	Spring
Master of Financial Engineering Candidate	2015 – 2016
 Purdue School of Engineering	
Master of Science In Electrical and Computer Engineering	August 2013
 Nanjing University of Posts and Telecommunications	
Bachelor of Science	June 2011

Skills Summary

- **Solid Programming Skills:** C, C++, MATLAB, Python.
- **Proficient in Math:** Probability, Linear Algebra, Statistics, Stochastic calculus, Algorithm.
- **Finance:** Option Pricing, Fixed income, Monte Carlo.
- **Languages:** English, Mandarin.
- Invested in US stock market for one year from March 2014 with a 40% return.

Team Projects

Project with CITI: Stochastic Spread and Default Transition

Current Progress:

- Simulation of stochastic default paths
- Building stochastic transition matrix based on default rate

Project with BlackRock: When Big Data Meets Over-The-Counter Trading

- Measure probability of informed trading in low frequency data
- Design trading strategy based on VPIN

Experience

Quantitative Financial Assurance Internship	Oct 2015 –
Moody's, San Francisco, CA	Jan 2016
<ul style="list-style-type: none">● Develop analytics prototypes and benchmarks for testing● Create test cases, execute tests, analyze testing results and provide summary reports to the project team● Execute automation test suites, regression tests, and financial testing systems● Provide 2nd tier support on modeling questions to MA clients	

Research assistant

Transportation Active Safety Institute (TASI), Indianapolis, Indiana	Sep 2012 –
Project with Toyota Collaborative Safety Research Center	Feb 2015
<ul style="list-style-type: none">● Crash Scenario Design● Pre-Collision System testing: Data processing and analysis.● Hardware programming (C++).	
Research Study with Driving Safety and Rehabilitation Research Lab	Oct 2012 –
<ul style="list-style-type: none">● Data collection and processing.● Technical Support: Driving simulation scenario programming.	

Publications

- Performance evaluation of routing protocols based on realistic traces from driving simulator. ICUIMC 2014:22
- Studying the effects of distraction and traffic density on the probability of crash and near-crash events in naturalistic environment. IEEE Transaction on Intelligent Transportation Systems 14(3): 1547 - 1555(2013)

Zhiping Chen
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EDUCATION

University of California, Berkeley - Haas School of Business	3/15 to 3/16
Master of Financial Engineering Candidate	
Industry Projects:	
• Citigroup Emerging Market Sovereign and Corporate Betas (team project, team leader)	
• Blackrock Topic Detection Algorithms and Event Study Toolbox (team project)	
Machine Learning (94.5%, Coursera, May 2014)	
University of California, Los Angeles - Department of Physics & Astronomy	9/07 to 8/13
PhD in Physics	
Peking University - School of Physics	9/03 to 7/07
Bachelor of Science in Physics	

SKILLS SUMMARY

- **Programming** - Matlab, Python, C++, R
- **Leadership** - co-creator of a successful Kickstarter project; co-founder of a startup company.
- **Machine Learning**
 - Participated two Kaggle contests (one finished 1st 16/162).
 - Familiar with various machine learning algorithms including CART, Neural Network, Topic modeling/LDA, Gradient Boost and etc.

EXPERIENCE

Morgan Stanley, New York, NY	10/15 to 1/16
Intern Fall Associate Strats within the Interest Rate Group	
Lumoto LLC, Los Angeles, CA	5/13 to 10/14
Co-founder	
• Created a novel device for panoramic and motion time-lapse photography using 3D printing.	
• Ran a successful campaign on the largest crowdfunding platform, Kickstarter (Project name: Spinpod, fund raised: over \$384, number of backer: 81, currently looking for a buyer).	
• Managed the mass production and the entire supply chain involving over ten manufacturers.	
Department of Physics & Astronomy at UCLA, Los Angeles, CA	1/10 to 8/13
Graduate Student Researcher	
• Developed tools in Matlab to aggregate and preprocess (denoising and interpolating missing data points) large data sets from multi-channel tetrode recordings and position tracking.	
• Created algorithms to automatically detect complex patterns and events (Sharp-wave ripples, theta events, etc.) from local field potentials (LFPs) in hippocampal CA1 region.	
• Conducted time and frequency domain analysis on multi-channel LFPs. Implemented correlation and regression analysis to investigate the dynamics between hippocampal rhythms and the running speed.	

PUBLICATIONS

1. Chen Z., et al, Optical and electrical properties of single catalyst-free GaAs nanowire, UCLA Electrical Engineering 2009 Annual Research Review, Los Angeles, CA, April 2009
2. Chen Z., Resnik E., McFarland J. M., Sakmann B., Mehta M. R. (2011). Speed controls the amplitude and timing of the hippocampal gamma rhythm. PLoS ONE 6, e21408. (Covered by US News and many other media)
3. Chen Z., Resnik E., Sakmann B., Mehta M. R. The speed dependent microstructure of hippocampal theta rhythm. Soc Neurosci Abstr 2012, 812.03

OTHER

Passed CFA Level I (Dec 2011)

ZHUO (BOB) CHEN

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Holds Green Card

EDUCATION

University of California, Berkeley

Master of Financial Engineering – Cumulative GPA: 3.914

B.S. Business Administration and B.A. Computer Science – Cumulative GPA: 3.950; Quantitative GPA: 4.00

March 2016

June 2014

Relevant coursework: Algorithms, Artificial Intelligence, Machine Learning

MapReduce project: process large dataset using Hadoop MapReduce on Amazon's EC2 service

GRE Scores: (Quant: 170/170, Verbal: 170/170, Writing: 5/6)

BlackRock Group Research Project, Berkeley, CA

Researcher – project part of MFE program; used matlab

May '15 to Sept. '15

- Analyzed high frequency TRACE data in the MBS market in search of trading opportunities.
- Explored applying VPIN to the TRACE data set and the accompanying modeling/implementation choices.
- Reviewed literature concerning VPIN and other metrics.

Citigroup Group Research Project, Berkeley, CA

Researcher – project part of MFE program; used matlab

Mar '15 to Sept. '15

- Applied Monte-Carlo simulation of future default rates and rating transition matrices to predict credit spreads.
- Modeled the interaction between default rates, rating transition matrices, and credit spreads.

CFA Level 1

Dec. 2014

SKILLS

Technical: Programming (C++, Java, Matlab, Python/Django, SQL, perl, etc.), UNIX operating systems, Microsoft Office (Incl. advanced Excel)

Languages: Native English, Fluent in Mandarin

EMPLOYMENT

Citadel LLC., Chicago, IL

Quantitative Research Analyst Intern - Long Term Quantitative Research Department

Oct' 15 to Jan '16

- Signal testing of new data sets involving hypothesis testing, simulation, parameterization, and backtesting.
- Identifying, gathering, and preprocessing new data sets.

UC Berkeley Robot Learning Lab, Berkeley, CA

Research Assistant; used C++, eigen, linear algebra packages (for C++), libsvm (open source Support Vector Machine tools) Sept.'13 to Mar. '14

- Co-authored a paper published at the 2014 IEEE International Conference on Robotics and Automation.
- Dug deep into the underlying assumptions and implementation of trajopt, a robotics trajectory planning system that converges to locally optimal solutions to non-convex optimization problems by repeatedly solving local convex approximations using quadratic programming.
- Uncovered fundamental assumption made in the trajopt model; that the global non-convex problem is locally well approximated by convex optimization problems.
- Designed features measuring how negative eigenvalues of Hessian matrices of cost and constraint functions were as indicators of local non-convexity of the overall problem (i.e. how far off the local convex approximations will be).
- Applied numerical differentiation techniques to evaluate Hessian matrices.
- Applied machine learning via a Support Vector Machine to predict the performance of trajopt on different initial trajectories, to improve optimization efficiency.
- Increased prediction accuracy of whether trajopt converges to a successful solution from 80% to 95%.
- Audited and applied graduate level Stanford online classes in Machine Learning, Linear Dynamical Systems, and Convex Optimization, covering topics including Semidefinite Programming, Quadratic Programming, and Linear Programming. (CS229, EE263, EE364A)

Amazon.com, Inc., Seattle, WA

Software Development Engineer; used C++, Java, Perl, Mason, CloudSearch, S3, Git, Shell Scripting

Aug. '14 to Mar. '15

Software Development Engineer Intern

Mar. '13 to Aug. '13

- Deployed retail website feature worth >\$75M / year in incremental revenue.
- Designed, implemented, and ran statistically rigorous A/B tests on another retail website feature, culminating in the launch of another retail website feature worth \$19M / year in incremental revenue.
- Developed and maintained code serving millions of customers with sub-millisecond latency.
- Redesigned the architecture of the data generation builds behind Amazon's hourly-updated bestseller lists, a system handling hundreds of gigabytes of data in a context where speed was critical.
- Made technical design decisions mindful of the tradeoffs between performance, memory and disk usage, ease of implementation, and maintainability in the context of business needs and constraints.
- Tuned a prototype search ranking algorithm with regard to precision, recall, and other measures of accuracy.

GENG CHENG

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Berkeley, CA 94704

cheng.g@berkeley.edu
510-326-8335

EDUCATION	University of California, Berkeley - Haas School of Business Master of Financial Engineering Candidate	Mar 2016
	University of Virginia Master of Arts in Economics Bachelor of Arts, Double Major in Economics & Mathematics; Minor in History	Aug 2013 May 2012
PROJECTS	When Big Data Meets OTC Trading, BlackRock (team of 5) <ul style="list-style-type: none">Measuring liquidity and positioning in the agency MBS market applying metrics developed for exchange traded products Stochastic Default and Rating transitions, Citi (team of 5) <ul style="list-style-type: none">Estimate the expected gains and losses on corporate bonds by incorporating stochastic default rates, corresponding recovery rates and stochastic credit spreads	Apr 2015 – Sept 2015 Apr 2015 – Sept 2015
SKILLS	Programming Languages: Matlab, Python, C++, Java, SQL, Stata, R	
RELEVANT EXPERIENCE	Mandara Capital, UK Derivative Trader/Analyst, Trading Department	Oct 2015-Jan 2016
	Huatai Securities, Nanjing, China Intern, Financial Derivatives Department <ul style="list-style-type: none">Backtested delta neutral hedging strategies and assisted in pricing of structured productsUsed multi-factor models and technical analysis indicators in stock selection strategies Intern, Investment Banking Department <ul style="list-style-type: none">Conducted due diligence investigations of client companies and assisted in preparing financial analyses to aid in investment decisions on a \$200 million acquisitionPrepared transaction documents used in the transaction process and other materials for marketing, business development and management presentations	Sept 2014-Jan 2015 May 2011-Aug 2011
	University of Virginia, Charlottesville, VA Research Assistant, Economics Department <ul style="list-style-type: none">Digitalized geographical features using ArcGIS and compiled various data setsUtilized literature resources to supplement, organize, and contribute to the databasesProcessed and transformed data sets between databases using statistical techniques as well as regression models; Evaluated economic or statistical relationships in databases Research Assistant, Darden School of Business <ul style="list-style-type: none">Collected and validated various forms of data on agriculture resources in TexasAnalyzed and interpreted data about the correlation between the appearance of the water market and the improved efficiency of agricultural water use	2009-2014 2013-2014
	Horizon Research Consulting Group, Shanghai, China Intern, Group of Real Estate <ul style="list-style-type: none">Collected, compiled and analyzed data from major developers' commercial projects in Harbin; Performed statistical analysis on the trend and opportunities of local competitionInterviewed clients and prepared ad hoc reports on satisfaction survey in 15 cities	May 2013-Aug 2013

Chizhao Dai

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(626) 741-8855 | chizhao_dai@mfe.berkeley.edu
Canadian citizen – Does not require H1B

EDUCATION

UNIVERSITY OF CALIFORNIA, BERKELEY – HAAS SCHOOL OF BUSINESS

Berkeley, CA

Master of Financial Engineering Candidate, GPA: 3.7/4.0

Mar. 2015 – Mar. 2016

- **Graduate Student Instructor:** C++ Programming and Numerical Analysis
- **Industry Project – Quantitative Trading:** Programmed a trading strategy backtesting application in Matlab to exploit closed-end fund statistical arbitrage for Convergence Investment Management
- **Thesis – Predict Liquidity and Transaction Cost Using Market Sentiment:** Develop an intraday liquidity prediction model and an exit strategy with minimal transaction cost; backtest the strategy using Marketspsych sentiment data on 100 US equities

UNIVERSITY OF TORONTO

Toronto, ON

Honors BASc. Engineering Science, GPA: 3.6/4.0

Sep. 2009 – Jun. 2014

- **Thesis:** Non-linear Credit Risk Models for Portfolio Optimization; **Capstone Design:** Real-time Tracking Under Uncertainty

PROFESSIONAL EXPERIENCE

MOODY'S ANALYTICS

San Francisco, CA

Quantitative Research Intern

Oct. 2015 – Jan. 2016

- Participated in CEO Mark Almeida's project – Predict bond default using public information and Risk Frontier simulator
- Parameterized probability of default; Invented new risk measures to rank bonds; Improved accuracy ratio from 59% to 88%
- Programmed over 6000 lines of R codes in 6 months; Analyzed 1.5 billion reports from 1993 to 2015 (200k observations)

GOLDENWISE CAPITAL MANAGEMENT

Toronto, ON

Quantitative Trader Intern

Oct. 2014 – Mar. 2015

- Engaged in US equity market making and gold-silver arbitrage; conducted sovereign research and client presentations
- Programmed a gold spread monitor and an implied volatility calculator in Matlab, and two automated market makers in C++

TORONTO GENERAL HOSPITAL

Toronto, ON

Wait Time Data Analyst

Sep. 2012 – Jul. 2013

- Forecast and optimize surgical wait times using R and SAS; presented to the Ministry of Health (Canada) every month
- Created a wait time optimization model and automated the patient reconciliation system; reduced operation time by 90%

LEADERSHIP AND COMMUNICATION

U OF T FINANCIAL OPTIMIZATION AND RISK MANAGEMENT SOCIETY (FORMS)

Toronto, ON

Co-Founder and President

Sep. 2012 – Jun. 2014

- Led a student executive team of 30+, organized 30+ events and attracted 1000+ paying members, a 12-fold increase
- Created FORMS Fund in both quantitative trading and value investing; generated an average annual return of 23.1%

SKILLS AND INTERESTS

- Languages: English (fluent), Mandarin (fluent), Cantonese(basic), Spanish (basic)
- Programming: R, C++, Matlab, SQL, VBA, SAS, Python
- Interests: Texas Hold'em (competitor), Chess (competitor), Clarinet (school orchestra), Nunchaku (performer)
- Certificate: CFA (level 2 candidate), FRM (passed all exams), Mensa Canada

Craig M. Dana, Ph.D.

craig_dana@mfe.berkeley.edu, 201-704-3147
1488 El Camino Real, Unit 209, South San Francisco, CA 94080

Education

Haas School of Business

Master of Financial Engineering - *Class President* GPA: 3.49/4.0

Expected: March 2016

- Finance Team Project with Mellon Capital Management:
Quantifying mispricing in emerging market sovereign debt
- Finance Team Project with BlackRock:
Term structure modeling

University of California, Berkeley

Ph.D. Chemical Engineering GPA: 3.9/4.0

December 2013

Rutgers University

B.S. Chemical Engineering GPA: 4.0/4.0

May 2007

Summary of Skills

- Python, Matlab, C++, R, Bloomberg, Mathematica
- Outstanding writing and communication skills

Experience

Associate in Quantitative Analytics, Barclays, New York

- Trading book risk

October 2015 – January 2016

Postdoctoral Researcher in Biomolecular Engineering and Bioinformatics, U.C. Berkeley

Researcher, under Douglas S. Clark

January 2014 – December 2014

- Developed Python-based software and applied C-based algorithms to select sets of genes from large public databases
- Leveraged quantitative experiments to analyze protein properties, leading to the discovery of a critical mechanism in protein induction

NSF Fellow, Alpha Pi Fellow, and Ph.D. student at Energy Biosciences Institute, U.C. Berkeley

Researcher, under Douglas S. Clark and Harvey W. Blanch, August 2007 – December 2013

- Conceived and developed a graph-theory-based technique to improve industrial enzymes
- Developed a platform to engineer the enzymes used to break down biomass, resulting in the discovery of several improved mutants and the advancement of enzyme production technology
- Filed a provisional patent on a key aspect of this platform
- Invented a DNA synthesis technique that circumvents technical hang-ups in standard procedures

Intern in Market Research, California Clean Energy Fund (CalCEF)

Summer 2012

- Identified and evaluated potential strategic partnerships for client startup company Allopartis
- Presented analyses to CEO and key fund partners at regular meetings

Awards, Publications, Patents, and Oral Presentations available at: <http://www.craigmdana.com>

LIWEI DONG

Cell: 314-828-0812 | Email: liwei_dong@mfe.berkeley.edu | Address: 625 West End Way #107, Albany, CA 94706

EDUCATION

University of California, Berkeley - Haas School of Business	3/15 to 3/16
Master of Financial Engineering Candidate	
University of California, Berkeley - College of Engineering	8/13 to 5/14
Master of Engineering in Industrial Engineering and Operations Research	
Case Western Reserve University	8/10 to 5/13
Bachelor of Arts in Mathematics and Economics	
London School of Economics and Political Science	6/11 to 8/11
Certificates of Completion in Advanced Econometrics and Alternative Investment	

SKILLS SUMMARY

- Finance** – over six months of professional experience in equity research and industry analysis in the Chinese market; one year of experience in applied quantitative analysis and large heterogeneous database.
- Software Development** – Matlab, R, C++, Excel VBA.
- Leadership/Communication Skills** – encourages collaboration, communication of projects.
- Language skills** – Fluent in English and Mandarin.

INDUSTRY EXPERIENCE

Millennium Management LLC	10/15 to 1/16
Fall intern, Global Macro Trading	
• Working directly with portfolio manager and gaining knowledge of research and trading in global currency, fixed income, equity, and commodity markets.	
• Build market data infrastructure and develop trading strategies.	
The RLF Capital Management / UC Berkeley Westernstone Project, Berkeley, CA	9/13 to 5/14
Quantitative Analyst Intern	
• Developed a trading algorithm by analyzing Google Trends data and received a return of 250% over a ten-year backtest.	
• Analyzed the effects of groundbreaking technologies on the financial market and monitored the performance of publicly traded companies.	
• Studied and compared Black-Scholes and GARCH option pricing model with historical price data.	
Shenwan Holding Securities Co., Ltd., Shanghai, China	10/14 to 2/15
Assistant Analyst	
• Performed fundamental research of renewable power and electric car sector in China.	
• Compiled daily news report of Chinese power equipment and renewable energy industry.	
BNP Paribas Equities (Asia) Limited, Shanghai, China	6/14 to 9/14
Equity Research Associate Intern	
• Developed and updated fundamental equity valuation models for companies in both renewable energy industry and environmental protection industry.	
• Gathered and analyzed data, using Bloomberg and Wind, to develop an industry vision.	
Case Western Reserve University, Cleveland, OH	9/12 to 5/12
Research Assistant for the Department of Banking and Finance	
• Studied bootstrapping and interpolation methods for yield curve construction.	
• Programmed VBA code for yield curve construction by implementing Nelson-Siegel method and forward monotone convex splines method.	
• Collected data of Repo general collateral rates and par bond yield by using Bloomberg terminal and Finra.	

INTERESTS

- Traveling, hiking, playing basketball, piano, and gaming.

YIRAN DUAN

6401 Shellmound Street, Apt 8201, Emeryville, CA 94608

+1(510)660-1898 yiran_duan@mfe.berkeley.edu

EDUCATION

University of California, Berkeley - Haas School of Business

3/2015 – 3/2016

Master of Financial Engineering

- **Industry Team Project**

Worked with BlackRock on applying machine learning techniques to analyze corporate files and find optimal trading strategies in Python and R

- **Rotman International Trading Competition**

Participated in the competition on behalf of the University of California, Berkeley

The University of Hong Kong

9/2010 – 6/2013

Bachelor of Science in Quantitative Finance

SKILLS SUMMARY

- **Qualifications** – CFA level 1; FRM Part 2
- **Programming** – C++, Java, VBA, Python, SQL, R, Matlab, Bloomberg Terminal
- **Languages** – Fluent in English, Mandarin and Cantonese

EXPERIENCE

Credit Suisse, Hong Kong

10/2015 – 1/2016

Equity Derivatives Structuring – Internship

- Developed an Excel application for a structured product of Credit Suisse to automatically update market data, calculate monthly performance, and generate PowerPoint presentations for different clients
- Initiated trading strategies based on technical indicators of China's stock market, collected and cleaned relevant data from Bloomberg, and programmed a set of models for back-testing
- Designed and constructed a control panel to manipulate, automate and supervise daily business activities including examining data validity, generating analytical reports, and sending important warning signals
- Conducted research into preferred stocks by analyzing theoretical factors influencing their price, computing empirical correlations, and discussing the effectiveness of possible hedging solutions
- Prepared portfolio-holding reports for clients and managed shared documents for the structuring team

Societe Generale Corporate & Investment Banking, Hong Kong

9/2013 – 9/2014

Risk & Valuation, Equity Derivatives Trading – Full-time

- Developed a financial model to automatically collect intraday stock prices, analyze the valuation discrepancy, update PnL databases, and generate analytical reports to High Frequency Trading Desk
- Programmed a model in VBA to integrate the information of listed options, compute position limits of different trading desks, and send out warnings of limit breaching to managers
- Initiated and completed a project to improve the functions, accuracy and stability of a core model to estimate funding consumption for Delta One Trading Desk
- Generated intraday PnL and risk analysis reports for the trading floor, detected errors and discrepancy in daily valuation, disclosed potential risks and recommended practical solutions to traders
- Managed databases of trading desks in SQL to achieve data immediacy, reliability, and continuity

American International Assurance Company, Limited, Hong Kong

6/2012 – 8/2012

Risk Management Department – Internship

- Developed a credit rating model, a cash flow consolidation model, and several applications for risk teams
- Undertook a project to enhance the credit spread estimation of a CDS pricing model with a new method

INTERESTS

- Trading stocks in China's market, tennis, table tennis, reading

BRIAN C.H. FANG

CHUNHUI_FANG@MFE.BERKELEY.EDU • 646-703-3928 • 2455 HILGARD AVENUE, APT. 12 • BERKELEY, CA 94709

EDUCATION & HONORS

UNIVERSITY OF CALIFORNIA, BERKELEY – HAAS SCHOOL OF BUSINESS
Master of Financial Engineering

BERKELEY, CA
Mar. 2015 – Present

CITY UNIVERSITY OF NEW YORK HONORS BARUCH COLLEGE – ZICKLIN SCHOOL OF BUSINESS
Bachelor of Business Administration, *magna cum laude*, December 2012

NEW YORK, NY
Aug. 2008 – Dec. 2012

GPA: 3.76 | **Major** in Finance; **Minor** in Mathematics and Psychology | **Honors:** Dean's List, Spring 2009 – Spring 2012
Actuarial Exams: Exam P/1 Passed March 2013; Exam FM/2 Passed June 2013

COLUMBIA UNIVERSITY – SCHOOL OF CONTINUING EDUCATION
Postbaccalaureate Studies: Ordinary Differential Equations, Linear Algebra, Partial Differential Equations

NEW YORK, NY
Jul. 2014 – Dec. 2014

EXPERIENCE

BLACKROCK
Scientific Active Equity Intern

SAN FRANCISCO, CA
Oct. 2015 – Jan. 2016

EUTHENIA CAPITAL
Research Analyst

NEW YORK, NY
Mar. 2014 – Dec. 2014

- Conducted industry research to identify key success factors for prospective start-up companies
- Sourced and performed preliminary analysis on the startup's market demand, traction, investment and financials

7PARK DATA
Data Analyst

NEW YORK, NY
Apr. 2014 – Sept. 2014

- Restructured the application mapping algorithm with PostgreSQL and Python for a cloud mobile dataset to capture user engagement intelligence across all geographical regions
- Built relational database models to relocate the entire database from 1010data to Amazon Redshift
- Refined the daily consumer spending Quantitative Analytics reporting method to compute metrics and discern abnormality

GRESHAM RISK PARTNERS
Quantitative Analyst Intern

NEW YORK, NY
Nov. 2012 – Dec. 2013

- Implemented logistic regression default model in Python to identify significant factors for CCAR stress testing
- Differentiated and prepared data sets of short-term bonds with Python and VBA to assist the analysis of these securities' performance and impact on the asset portfolio
- Automated the upload of model to reduce the operational time of data into the Oracle schema from seven to three days

BANK OF CHINA, US
Operations Intern

NEW YORK, NY
May 2011 – Dec. 2011

- Handled round trips, remittance and account applications

EXTRACURRICULAR ACTIVITIES & LEADERSHIP

MFE BERKELEY TRADING COMPETITION
2nd Place Winner

BERKELEY, CA
Sept. 2015

- Designed and executed trading strategies for five independent cases – Algorithm, Commodity, M&A, Option, Price Discovery

UBELONG

CUZCO, PERU

Volunteer & Recipient of the President's Volunteer Service Award

Dec. 2011 – Jan. 2012

- Organized recreational activities for malnourished children and assisted local initiatives at the Center of Nutritional Rehabilitation in checking the children's nutritional status

JP MORGAN CHASE & CO. INTERNAL AUDIT CASE STUDY COMPETITION
1st Place Winner

NEW YORK, NY
October 2011

- Analyzed business model and scrutinized the customer experience throughout the life cycle of a loan
- Conducted risk evaluations from a customer's perspective and identified operational controls to help mitigate those risks

SKILLS & INTERESTS

- Language skills:** Native in Cantonese and Mandarin Chinese; experienced in translating between English and Chinese
- Programming:** Bloomberg, C++, Python, R, SQL, VBA
- Interests:** Coffee tasting, collecting limited-edition sneakers, kickboxing, reading, singing, traveling

Rong (Hannah) Fu

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Canadian Citizen

Education

University of California at Berkeley- Haas School of Business

Master of Financial Engineering

Berkeley, CA

Expected Mar 2016

- Hedge fund, Domeyard, "Statistical Approach for Event-Driven Trading Signal Detection Model"

University of Toronto

Honours B.A.Sc. in Engineering Science

Toronto, ON

June 2014

- Thesis project "Finite difference methods to price American put options"
 - Used numerical methods to solve LCP discretized by finite difference methods by MATLAB
 - Discovered the error convergence rates among PSOR, Reduced space, Penalty, and front fixing methods

- Capstone project "Index tracking model"
 - Constructed dynamic programming model to form portfolio mimicking popular index by MATLAB

- Engineering robot design project, "Fully autonomous, sensing, real time controlled dispensing robot"

Chartered Financial Analyst Level I

Dec 2013

Financial Risk Manager Part I, Part II

May 2013, Nov 2014

Skills

- **Software Development:** C++, Python (NumPy, SciPy, Pandas), MATLAB, KSH, Shell, C/C++
- **Finance:** Over three years of software development experience in risk, income and equity products
- **Languages:** Professional proficient in English; Native in Mandarin; Conversant in Japanese; Basic in Korean
- **Mathematics:** Stochastic Calculus, Linear Algebra, Probability Theory, Time Series Analysis

Experience

Standard & Poor's Rating Services

Structured Finance, Quantitative Analytics Research Group associate

New York, NY

Oct 2015 - Jan 2016

- Research modeling approaches and the estimation of parameters of credit spread, interest rate, and FX simulation

Bank of Nova Scotia

Market Risk Measurement – Model development analyst

Toronto, ON

May 2014-Mar 2015

- Performed numerous statistical studies on PCA-based Factor model for Economical Capital reserve using Python
- Enhanced the data processing algorithm in the risk model for CDX, and other credit products using Python/C++
- Designed and implemented an equity futures risk factor VaR model for equity trading desks via C++ independently

Toronto Hydro

Engineering intern

Toronto, ON

Sept 2012-Aug 2013

- Designed and created an access database using VBA/SQL which expedite, improve financial budgeting process
- Monitored the status of 100M capital projects; identified schedule/cost non-conformances changes using Access

University of Toronto

Research Assistant

Toronto, ON

May 2012-Aug 2012

- Implemented a self-similar model to analyze stock prices and High Frequency Trading stock behaviors
- Constructed a database to store data from both the finance and health care areas by SQL and MATLAB

University of Toronto

Research Assistant

Toronto, ON

Sept 2011-Apr 2012

- Applied regression model to discover the pulsating behaviors of variable stars using Time Series analysis

Publications

- Percy John, and Rong Fu, "Pulsation Period of Hot Hydrogen-Deficient Star MV Sgr", the journal of AAVSO, 2012
- "Studies of R Coronae Borealis Stars", poster paper at the Canadian Astronomical Society annual conference, 2012

Awards and Interests

- Canadian Mathematics Olympiad National Prize
- China Hubei Provincial Mathematics Olympiad First Prize

Lingfeng Gao

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U.S. Permanent Resident

EDUCATION

University of California, Berkeley - Haas School of Business

Master of Financial Engineering Candidate, **GPA: 3.87/4.00**

3/15 to 3/16

Citi Credit Quantitative Analysis Project: Sovereign Bond Relative Value Trade (Team of 5)

4/15 to 10/15

- Developed a probability default based trading strategy of sovereign bonds that offers a higher return than World Government Bond Index (WGBI) with a higher Sharpe ratio.

Implied Volatility from Market Micro-structure (Team of 3)

7/15 to 10/15

- Modeled market orders as put/call options to improve the GARCH model for stock volatility forecasting.

University of Michigan

M.S.E in Electrical Engineering, **GPA: 3.9/4.0**

9/10 to 4/12

B.S.E in Naval Architecture and Marine Engineering, **GPA: 3.7/4.0**

9/08 to 4/10

CFA Level 1

6/14

SKILLS SUMMARY

- Finance** – Experience in strategy research, trading systems, financial data processing and back office systems design at a quantitative hedge fund. Understanding of complex arbitrage, high frequency trading.
- Software Development** – Python, MATLAB, C++, MySQL, C, LaTeX

EXPERIENCE

Sun Trading LLC, Chicago, IL

10/15 to 1/16

Intern

Water Valley Capital Management, Hong Kong

7/14 to 1/15

Intern

- Designed a lead-lag spotter of the S&P index using buy/sell pressure from order book bid-ask data, reducing delta hedging cost and variability. Developed an intraday trading strategy based on the spotter.
- Developed a front end python back testing platform capable of simulating high-frequency data.
- Back tested various strategies on China Commodity Futures, optimized parameters via statistical analysis.
- Created a framework to aid in risk arbitrage trading by providing real-time mispricing and basis, with front end pull requests using Reuters API and back end downloading static info using Bloomberg API.
- Implemented a back office system that automates daily deal validation, provides interface for the middle office booking, and calculates portfolio risk parameters.

Cummins Inc., Columbus, IN

6/12 to 6/14

Senior Software Engineer

- Led a cross-functional team to create new features for the anti-theft system. Delivered software two months under deadline, and managed software testing and integration.
- Led a team of five for a Six Sigma project to optimize software development process. The project yielded \$200,000 in annual savings and reduced software development time by 80%.

PUBLICATIONS

Gao, Ghaemi, Sun, 2011, "Nonlinear Adaptive Model Predictive Control for Ship Path-Following Using Parametric Neighbouring Extremal Approach", 11th International Conference on Fast Sea Transportation, Honolulu, Hawaii.

INTERESTS

- Guitar, drum, and photography. Hosted a guitar video channel with more than 800,000 views

JOHN BRODIE GAY

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510.388.4024

john_gay@mfe.berkeley.edu

EDUCATION

University of California, Berkeley - Haas School of Business
Master of Financial Engineering Candidate

3/15 - 3/16

University of California, Berkeley - College of Engineering
Bachelor of Engineering Physics

8/10 - 5/14

BAT: Ranked Top 5 in the Americas (4/15), Passed CFA Level 1, Earned Bilingual IB Diploma (French/English)

SKILLS SUMMARY

- **Technical Knowledge** – Asset and derivative pricing, machine learning, computer vision, natural language processing, patent drafting and litigation, large-scale database searching.
- **Programming** – MATLAB, Python, AMPL, C++ and R.
- **Communication** – Wrote stock-pitch articles for Seeking Alpha, featured in undergraduate-level coursework.
- **Languages** – English and French.

EXPERIENCE

Goldman Sachs, New York City, US
Financial Institutions Group Quantitative Intern

10/15 - Present

J&J Investments

Executive Partner and Cofounder

7/13 - Present

- Incorporated a real estate firm during college studies.
- Invested in single-family homes across Atlanta, MS and Detroit, MI.
- Assembled and directed management teams in both locations to take over day-to-day operations.

Hill & Schumacher, Patent Agency, Toronto, ON, Canada

6/11 - 9/14

Patent Agent Apprentice

- Drafted and prioritized patents spanning the fields of aeronautics, solid-state physics, biochemistry and computing.
- Conducted extensive natural language prior-art searches to report novelty and inventiveness of patents.
- Developed the intellectual property portfolio for Openfolio®, a financial social network start-up.

ACTIVITIES

Capital Investments, Berkeley, Berkeley, CA, USA

3/13 - 3/14

Portfolio Director of Student-run Investment Club

- Directed all trade executions for the \$50k portfolio and actively maintained diversification and beta targets.
- Achieved a rate of return of 25% during my term as portfolio director (vs. S&P 500 return of 21%).

Sigma Pi Fraternity International, Berkeley, CA, USA

12/12 - Present

Treasurer of the Alumni Board (current), Financial Chair of the Fraternity (past)

- Enforced dues collections of \$150k/year, drafted the annual budget and paid expenses.
- Reincorporated the housing board and eliminated a long term tax liability by refinancing the mortgage.

RESEARCH

"Bid-Ask Spread Implied Volatility," an empirical study of information content stored in the high-frequency market microstructure for volatility estimation and forecasting.

VIDUR GOEL

945 Ohlone Ave., Apt. 959, Albany, CA 94706

510.499.7504, vidur_goel@mfe.berkeley.edu

EDUCATION

University of California, Berkeley - Haas School of Business

3/15 to 3/16

Master of Financial Engineering Candidate

- Predicting ROE changes using SEC filings text (Project with Citigroup)
 - Scanned SEC filings of S&P 500 companies to extract features using Python's natural language processing
 - Used deep learning tools like bag of words and doc2vec to extract features from filings
 - Implemented gradient boosting machine to train the sample data on next quarter up/down move in ROE

Indian Institute of Technology, Kanpur, India

7/08 to 5/13

Master of Science (5 year integrated) in Mathematics and Scientific Computing

- Statistical arbitrage trading: Pairs trading using PCA
 - Technique based on a related paper on 'Statistical Arbitrage in the US Equities Market' published in CIMS, NYU

CFA Level I Passed

12/14

SKILLS SUMMARY

- **Finance** – Credit Risk modelling, Time Series Analysis, Statistical Arbitrage Trading
- **Technical Skills** – C++, Python, MATLAB, R, VBA, Excel, SAS, SQL
- **Leadership/Communication skills** – Captain of Institute Cricket team, presented a white paper at Deutsche Bank

EXPERIENCE

Morgan Stanley, London

10/15 to 12/15

Strategies and Modeling

Credit Strats Desk Fall Associate

Credit Suisse, Mumbai, India

2/14 to 3/15

Analyst, Credit Risk Management

- Developed factor models to assign Probability of Default and Ratings to counterparties under IB/PB by choosing relevant quantitative and qualitative factors (using R)
- Reviewed vendor rating models for Broker Dealers (B/D), NBFIs and Non-Life Insurance (NLI) portfolios
- Estimated implied B/D, NBI and NLI models on RWA; achieved a reduction of 18% in RWA in NLI portfolio

Imperial College London – Research Intern

5/12 to 7/12

Title: Applications of Longstaff-Schwartz algorithm under the guidance of Prof. Mark Davis

- Developed Risk Management techniques incorporating behavioral factors like sentiment, herd behavior (MATLAB)
- Developed algorithm using Monte Carlo based approach, similar to Longstaff-Schwartz algorithm
- Priced European call option and solved Heat Equation, by identifying the correct basis function in algorithm

LaBRI, University of Bordeaux I, France – Research Intern

6/11 to 7/11

Title: Designing of WebCrawler and Backlinks Plug-ins in Tulip under the guidance of Prof. Maylis Delest

- Studied functionalities of Tulip, an information visualization software written in C++ language
- Revamped WebCrawler plugin to extract URLs on web and added features like crawling depth, banned domains
- Designed Backlinks plugin which extracted backlinks for the input URL from information on Yahoo Site Explorer

ACHIEVEMENTS AND INTERESTS

- Name published in Timothy Crack's book: Basic Black-Scholes (3rd edition), recognized for finding an error in book
- National Cyber Olympiad, 2008 (Rd1): Awarded Gold Medal for securing All India Rank 4
- Playing cricket, dancing and teaching IGCSE Math to school kids

DARON LEIGH GOLDEN
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EDUCATION

University of California, Berkeley - Haas School of Business	3/2015 to 3/2016
- Master of Financial Engineering Candidate – Cumulative GPA: 4.0	
- VP, Financial Engineering Student Association (FESA)	
University of Cape Town (UCT)	2/2011 to 12/2014
- Bachelor of Business Science, with distinction – Rank: 1st	
- Concentrations: Statistics & Actuarial Science	

SKILLS

- Strong Matlab, R, Python and LaTeX skills. Knowledge of VBA, C++, Java, SQL
- Machine Learning (Stanford University via Coursera).
- Active portfolio management, asset backed securities, logistic regression, Bayesian statistics, backtesting, optimization
- Broad and rigorous training in statistics, economics, mathematics and finance
- **Award-winning research** at Peregrine Securities, a provider of execution and trading products.
- Outstanding oral and written communication skills. Native English.

ACADEMIC PROJECTS

Haas School of Business Asset Backed Securities project	9/2015 to 9/2015
- "Using location-based diversification of the local school to maximize the amount of AAA paper"	
Peregrine Securities Finance research project	3/2014 to 10/2014
- "Improving portfolio allocation using covariance matrix filtering: An empirical study of the South African equity market" Tools: shrinkage, from matrix theory, PCA, regularization, MV optimization	
- Discovery Prize for the Best Honors Project in Actuarial Science at a South African university	

EXPERIENCE

Goldman Sachs Intern, Financial Institutions Group	10/2015 to 1/2016
- Provided analysis and helped manage client solutions to financial institutions	
Deloitte Intern Actuarial and Finance Solutions	1/2014 to 2/2014
- Automated model point file construction for valuations using DCS, a proprietary language	
- Performed comprehensive data validations and prepared findings for clients	
Momentum Intern	7/2013 to 7/2013
- Executed a defined benefit pension plan member transfer	
Ernst & Young Intern	7/2011 to 7/2011
- Worked on databases using SQL and conducted independent research	

ACHIEVEMENTS

- Dean's Merit List: 2011-2014
- Highest GPA in undergraduate class
- Ten first place class medals at UCT
- Economics Research Southern Africa Prize
- Allan Gray Competition for best Business Science students at UCT: 1st place
- Western Cape Matric (school leaving) results: 9th place from over 45 000

OTHER

- **Passed CFA Level I**
- Tutor (TA) for Micro- and Macroeconomics both privately and for the University of Cape Town
- Enjoy swimming, playing piano (jazz and classical), and hiking

ELENA GORSKAYA, CFA

1111 J Street, Davis, CA 95616

631.875.5561

elena_gorskaya@mfe.berkeley.edu

EDUCATION

University of California, Berkeley - Haas School of Business March 2015 - March 2016

Master of Financial Engineering Candidate

Team project with Citi: "Sovereign Bond Relative Value Trade"

Team project with Blackrock: "Empirical estimation of convexity in the agency MBS TBA market"

New Economic School, Russia September 2005 - June 2007

Master of Economics

Moscow State University, Russia September 2001 - June 2006

Diploma in Mathematics

- Summa Cum Laude. Areas of expertise: Probability Theory and Statistics.

SKILLS SUMMARY

- Skilled quantitative analyst experienced both in statistical analysis and fixed income investment management.
- Proficient in C++, VBA, Matlab, Python (numpy/pandas), SQL, R.
- Languages – Fluent in English and Russian.

INDUSTRY EXPERIENCE

Morgan Stanley, New York October 2015 - December 2015

Strategies and Modeling, Bank Resources Management Group Associate Intern

- Use C++ to improve pricing of interest rate derivatives.

Sberbank Asset Management (\$4bn AUM), New York November 2012 - October 2014

Quantitative Analyst, Portfolio Management Group

- Performed quantitative investment research for fixed income strategies with a focus on asset allocation, liquidity and interest rate hedging, risk management and performance analysis.
- New products development. Developed analytical framework for leveraged high yield fund and structured fixed income funds notes.
- Designed and implemented multiple quantitative research client requests, including liquidity analysis, risk profile, stress testing and scenario analysis.

Troika Dialog Asset Management (\$4bn AUM), Moscow, Russia October 2006 - November 2012

Quantitative Analyst, Portfolio Management Group

- Quantitative research for fixed income strategies with a focus on Russia and CIS corporate bonds (IG and HY)
- Developed and maintained pricing models/tools for new fixed income products (credit derivatives, structured notes). Designed pricing model for \$1bn bond-backed CDO (pioneer product for Russian market).
- Used SQL and VBA to clean/parse raw datasets for further modeling tasks

Troika Dialog, Moscow, Russia June 2006 - August 2006

Intern - Equity Derivatives Desk

- Build Excel/VBA templates to assist traders with producing daily P&L reports

INTERESTS

- Volunteering - served as an environmental volunteer on a project in the United Kingdom and as a summer teacher at an orphanage in Russia.
- Hobbies – art and opera

Yuan Yuan (Edwina) Gu
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EDUCATION

- University of California, Berkeley:** Masters of Financial Engineering Mar. 2016
- Passed all 3 levels of CFA, SOA exam P (Probability) and SOA exam FM (Financial Mathematics)
 - Independent Study on Weather Derivative: Analyze, compare and extend existing CDD/HDD based weather options
 - Independent Paid Project on Pricing Forward Contracts: Built a 20-year diesel fuel pricing model and a 20-year LNG pricing model and wrote a 30 page report on model for contract negotiation.
 - Mellon Capital Academic Team Project: evaluating sovereign risk in developing country's local currency bonds (with 3 other MFEs)
- University of Waterloo:** B. Math - Actuarial Science and B.BA – Finance with Distinction Jun. 2012
- Double degree program in conjunction with Wilfrid Laurier University

SKILLS SUMMARY

- Finance: Modeled energy forward curves, forecasted customer usage and utility rates
- Communication/Leadership: prepared drafts for press release, interim team leader for residential structuring at Just Energy.
- Programming: SQL,R,MATLAB, R, Visual Basic, C

RELEVANT INDUSTRY EXPERIENCE

- Leith Wheeler, Vancouver Canada**
Application Support Analyst Oct. 2015 – Jan. 2016
- Will be investigating, exploring and implementing new initiative
 - Will be working on a research project involving sentimental data analysis and price trends.
- Just Energy, Mississauga Canada**
Product Structuring and Market Analytics Senior Analyst Apr 2012 – Mar. 2015
- Used optimization model to design time-of-use power products that reduced customer attrition rate
 - Analyzed energy costs using regression to support hedge recommendations that would maintain competitiveness during PJM/ISO-NE summers and ISO-NE winters.
 - Researched market fundamental to build improved factor based cost models for pricing all Just Energy's contracts in 19 different markets
 - Was promoted in 2014. Acted as a Business side leader on a project that improved transparency and accuracy in the financial forecasting and budget reporting system
- Canada Pension Plan Investment Board, Toronto Canada**
Trading Strategist Intern Jan. 2010 – Apr. 2010; Jan. 2011 – Apr. 2011
- Worked on an Ornstein-Uhlenbeck based term structure model and applied it to CDS and Interest Rate Swap to take advantage of possible arbitrage opportunities
 - Analyzed the effects of weather derivatives on the agricultural industry for strategic planning purpose

HRACHYA HARUTYUNYAN

405 Red Oak Avenue, #202, Albany, CA 94706, USA

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EDUCATION

University of California, Berkeley - Haas School of Business

3/15 to 3/16

Master of Financial Engineering Candidate

- Finance Team Project:

Estimating Implied Volatility Using Market Microstructure Data.

Yerevan State University

9/03 to 6/12

PhD/MS/BS in Mathematics

SKILLS SUMMARY

- **Finance** – over five years of portfolio management experience at investment firm and mutual funds.
- **Programming languages** – MatLab, C++.
- **Leadership/Communication Skills** – managed an investment team/completed projects.
- **Languages** – Fluent in English, Russian, Armenian (native).

EXPERIENCE

BlackRock, San Francisco, US

10/15 to 01/16

Internship: Scientific Active Equities (SAE) Department

Capital Asset Management, Yerevan, Armenia

12/09 to 02/15

CEO

8/14 to 02/15

- Implemented the management of a company managing mutual and mandatory pension funds.
- Led a team of fifteen individuals.

Fund Manager

10/12 to 08/14

- Managed a mutual fund with assets around \$50 million investing mainly in fixed income securities.

Portfolio Manager/Investment Advisor

12/09 to 10/12

- Managed a corporate bond portfolio. Delivered investment advisory services to institutional and retail clients.

Yerevan State University/AYB Science Hub, Yerevan, Armenia

1/10 to 12/14

Lecturer

- Delivered lectures on probability, statistics, math analysis, calculus, geometry.
- Co-managed national math team of RA representing the country in the IMO (International Mathematical Olympiad).

INTERESTS

- Science (author of more than 10 articles in stochastic and integral geometry), running, playing football, solving Rubik's cubes.

RECENT PUBLICATIONS

- H. S. Harutyunyan, V. K. Ohanyan, "Orientation-Dependent Section Distributions For Convex Bodies", Journal of Contemporary Mathematical Analysis - Springer, Vol. 49, No. 3, pp. 3-24, 2014.
- H. S. Harutyunyan, N. G. Aharonyan and V. K. Ohanyan, "Random copy of a segment within a convex domain", Journal of Contemporary Mathematical Analysis - Springer, Vol. 45, No. 6, pp. 348-356, 2010.
- H. S. Harutyunyan, V. K. Ohanyan, "Chord Length Distribution Function for Regular Polygons", Advances In Applied Probability (SGSA), Vol. 41, No. 2, pp. 358-366, 2009.
- W. Gille, H. S. Harutyunyan and N. Aharonyan, "Chord length distribution of pentagonal and hexagonal rods: relation to small-angle scattering", Journal of Applied Crystallography, No. 42, pp. 322-328, 2009.

Olivier HERBOUT
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Education

University of California Berkeley – Berkeley, California

03/15 – 03/16

Master of Financial Engineering

- *Relevant courses:* Empirical Methods in Finance, Investments and Derivatives, Introduction to Stochastic Calculus, Derivatives: Quantitative Methods, Fixed Income Markets, Credit Risk Modelling, Optimization models in Finance, Equity and Currency Markets.
- *Project:* Forecast volatility using machine learning techniques

Ecole Centrale Paris (ECP) – Paris, France

09/12 – 06/14

Master of Science in Applied Mathematics

- *Relevant courses:* Advanced Statistics, Random Modelling, Financial Mathematics, Economics, Corporate and Accounting Finance
- *Projects:* Developed a smart app that proposes a shopping list adapted to your needs at the lowest price
Created a robot crawler in Python that takes item prices from supermarket websites

Bachelor of Engineering (GPA: 3.84)

Preparatory Classes, PCSI/PC*, Lycée Henri IV – Paris, France

09/09 – 06/12

Intensive preparation in math and physics for the entrance exams to Grandes Écoles (GPA: 3.91)

Ranked in the top 2% out of more than 6000 candidates at the national entrance exam

Skills

Programming: Python, R, VBA

Languages: Fluent in English, French and Spanish

Work Experience

Intern, Goldman Sachs – NY, New York

10/15 – 01/16

Strats Intern in the GSAM Division

Quantitative Hedge Fund Intern, Panorama Partners – NY, New York

06/14 – 02/15

Built and Developed LEAD option trading strategies using VBA

- Recreated missing data, implemented different techniques such as backtesting and Monte Carlo
- Improved these strategies doing clustering and focusing on VIX level
- 40,000 options continuously analyzed

Optimized and automatized Portfolio Management

Summer Intern, Octoplus – Paris, France

06/13 – 08/13

- Designed part of the web app in HTML and CSS for this start-up specialized in the mobile payment
- Tested prototypes and debugged client monitors

Interests

Judo

since 1995

Black Belt (1st Dan) – Intensive practice

Junior France Team Champion (2008), UGSEL France Champion(2007), Paris Champion (2009, 2007, 2005)

Grégoire JARZAGUET

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EDUCATION

University of California, Berkeley – Haas School of Business

Master of Financial Engineering (GPA: 3.86/4)

Berkeley, CA

March 2015 – March 2016

Washington University in St. Louis – Olin Business School

Master in Business Administration – Exchange student

Saint Louis, MO

January – May 2014

Université Paris-Dauphine

Magistère BFA (Banking, Finance, and Insurance)

Master in Economics in Banking, Finance and, Insurance

2014

Degree in Applied Economics and Financial Engineering (15/20 – 1st over 658 students)

2012

Bachelor in Economics

Summa cum laude (16/20 – Ranking: 4th over 658 students)

2011

SKILLS

Language skills: French (Native), English (fluent: TOEFL 111/120, GMAT 730/800), Spanish

Computer skills: Python, VBA, C++, Matlab, R, and SQL

INTERNSHIP EXPERIENCE

JP Morgan, New York City, USA

Intern, Firm-Wide Market Risk

October 2015 – January 2016

SPGP [Hedge Fund], Paris, France

Intern, Asset Manager and Trader Assistant

September 2014 – February 2015

- Developed trading tools to analyze market opportunities and monitor option risks for the trading desk
- Financial analysis of mid cap and IPO companies with DCF, DDM, and multiples valuations
- Back-tested and implemented quantitative hedging strategies

ETHIEA Gestion Financière et Management de la Boutique], Paris, France

Summer Internship, Financial Analyst

July 2013 – September 2013

- Analysis of dynamics and behavior of firms related to long term investment positions
- Synthesis of annual and half-year result presentation meetings of mid cap and large cap firms

Banque de France, Paris, France

Summer Internship, Financial Analyst

June 2012 – August 2012

- Issued credit rating 150 firms; in-person meetings with key decision makers of the analyzed companies

Natixis, Groupe BPCE, Paris, France

Summer Internship, Brokerage Bond Sales

July 2011 – August 2011

- Broker assistant, use of Bloomberg and market analysis

LEADERSHIP EXPERIENCE

Association of the Magistère Banque Finance Assurance

Treasurer

May 2012 – May 2013

- Account management, organization and supervision of many events (3 professional events, a global conference, a ski week, a trip to London, etc.), and creation of the website magisterebfa.dauphine.fr

Dauphine Junior Conseil, Junior Entreprise of Université Paris-Dauphine

Project Manager and Deputy Treasurer

September 2009 – May 2012

- Management of invoices and payment slips; Monthly computation and reporting of VAT and social taxes
- Achievement of market studies for several clients (such as L'Oréal or Bouygues Immobilier)

INTERESTS

Sports: Horseback riding, sailing, and skiing; member of the Racing Club de France

SIHE (Sara) JIANG
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EDUCATION

University of California, Berkeley- Haas Business School

3/2015-3/2016

- Master of Financial Engineering Candidate
- Cumulative GPA: 3.957/4.0
- Projects: BlackRock (Team of 4 MFEs): Empirical Estimation of Convexity in the Agency MBS Market
Citigroup (Team of 5 MFEs): Sovereign Bond Relative Value Trade

University of Hong Kong

9/2010-11/2013

- Bachelor of Science in Statistics and double major in Finance
- First Class Honors, Cumulative GPA: 3.80
- Data Mining Project: conducted research on the U.S. used car market to predict “bad buys” with techniques including decision trees, logistic regressions, neural networks and etc. in SAS (team of 3)

SKILLS SUMMARY

- Professional Certifications: FRM, CFA Level III Candidate
- Programming Skills: VBA, Python, Matlab, C++, SAS, R, Bloomberg
- Language Skills: fluent in English, Mandarin, Cantonese

WORKING EXPERIENCE

Moody's Analytics, San Francisco

10/2015-1/2016

Internship, Quantitative Research Department

Natixis Asia Limited, Hong Kong

12/2013-1/2015

Full-time, Fixed Income and FX Trading Department

- Supported daily trading activities in the HK interest rates trading desk: prepared morning commentary on the HK spot market, initiated deal tickets and assisted IRS pricing for clients.
- Developed internal pricing functions in VBA with Bloomberg API to assist traders with proprietary trading and hedging activities, including data hedging analysis, multiple regression models.
- Performed research on the dynamics of interest rate term structures and implied volatility surfaces using PCA and 3-D PCA methods and conducted strategies back-testing.
- Worked closely with traders in IT quant and middle office to improve SQL functions to interact with the internal trading database and risk management tools.

FTSE Group Limited, Hong Kong

7/2013-12/2013

Internship, Research Department

- Participated in the design of FTSE China Index Series: Conducted equity research to identify N shares, P chips and Red chips among over 1000 equities in the U.S. and Hong Kong markets. Ran liquidity tests of selected companies in VBA with Datastream and Bloomberg.
- Assisted in the consolidation process of FTSE MPF Index Series and Asia free flows

School of Economics and Finance, University of Hong Kong, Hong Kong

5/2013-7/2013

Part-time, Research Assistant

- Conducted data collection, preparation and statistical analysis in SAS and R on U.S. repo markets under the supervision of Dr. Grace, Xing Hu.

INTERESTS

- Travelling, sports and graphic visualization

Ivaylo Karageurov

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Education

University of California, Berkeley – Haas School of Business

- Master of Financial Engineering Candidate - Expected graduation: March 2016

San Francisco State University – BS in Computer Science; Cum Laude (2013)

Advanced Options Trading Course with San Jose Options

Skills

Programming Languages: C/C++/Java/Matlab

Options trading and hedging

Econometrics and financial modeling

Derivatives pricing

High performance computing: Experience with CUDA, MPI and pthreads

Excellent communication and presentation skills

Work Experience

Atlas Capital Advisors (Oct. 2015 – Jan. 2016) – Investment Management (Internship)

- Research and implementation of investment strategies
- Assist in enhancements to software used for client assets

Academic Projects

Derivatives Pricing

- Priced various derivatives using Monte Carlo simulations, binomial tree methods and finite difference pricing methods
- Implemented Leland's volatility for dynamic option replication with transaction costs
- Developed variance reduction techniques in Monte Carlo simulations such as antithetic variates and control variates

Asset Allocation Methodology

- Developed a framework for equity allocation throughout shifting markets
- Researched and implemented a recession forecastability metric
- Backtested various portfolio allocations to minimize large drawdown

Currency Trading Backtest

- Researched and created ideas for FX trading strategy
- Implemented code for backtesting given strategy
- Presented results to audience

High Performance Computing

- N-body Problem - simulation of particles' movement and collisions within an enclosed space
 - Implemented CUDA kernels for particle movement and particle collision detection

Min Seong Kim

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EDUCATION

University of California, Berkeley - Haas School of Business Master of Financial Engineering Candidate	3/15 to 3/16
Korea National Open University, Seoul, S.Korea Majored in Computer Science , GPA: 3.80/4.30 Successfully completed C,C++,Java, Data Structures, Algorithms, Database	3/12 to 6/14
Hanyang University, Seoul, S.Korea BS in Business Administration, GPA: 3.74/4.00 Honors: Graduated cum laude, scholarship for academic excellence	3/00 to 12/07

SKILLS SUMMARY

- Finance** – Certified Financial Risk Manager (FRM), CFA Level III Candidate
- Software Development** – C++, Matlab, Python, R, Oracle SQL Developer
- Language Skills** – English (fluent), Korean (native)

TEAM PROJECT

Citibank – The Sovereign Bond Risk Premium	4/15 to 9/15
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EXPERIENCE

Premium Point Investments, NY, USA Junior Portfolio Manager(Intern), Residential Mortgage Backed Security & Fixed Income Trading	10/15 to 1/16
Deutsche Asset & Wealth Management, Deutsche Bank Group, Seoul, S.Korea Associate, Multi–Asset team, Active Investment Management Division	11/07 to 9/14
<ul style="list-style-type: none">Managed long only, multi-asset funds for institutional and retail clients, which involved taking active positions and views, via investments in exchange-traded funds and derivatives in US, UK and Korean marketsCollaborated with senior portfolio managers to oversee several foreign funds (total AUM: USD 350 million) invested across a range of asset classes, including equity dividends, inflation-linked bonds, and commoditiesDeveloped SQL queries to analyze data (e.g., NAV, derivatives position) for more than 20 managed accountsDesigned quantitative models through R to identify trading signals based on changes in the term structure of commodities futures and back tested systematic trading strategies using tick data from BloombergMonitored daily risk exposures and conducted performance attribution analyses across all managed accountsProvided strategic and tactical recommendations on USD/KRW currency for the global investment management division and took long/short positions based on conviction levels via our internal alpha source databaseBuilt market-neutral portfolio construction methodologies and supported the management of the absolute return fund based on leveraged long/short global equity index ETFsEnhanced currency hedging strategies on overseas funds, including an internal trading manual creation for foreign exchange derivatives, and presented relevant methods to institutional clientsRecommended trading strategies to senior managers based on multiple technical indicators (e.g., Ichimoku)	

AWARDS & TRAINING

BitSchool C, C++ Programming Master, Seoul, S.Korea	11/14 to 1/15
<ul style="list-style-type: none">Completed the intensive C, C++ language training programs (120hrs) with coursework that included basic and advanced applications (e.g., stl, design pattern) from professionals at BitSchool, Software Expert Training Institute	

ACTIVITIES & INTERESTS

- Military Service:** Served as an assistant fire fighter at Anyang Fire Station in Korea (12/ 01 to 4/04)
- Hobbies:** meditation, swimming, and playing soccer

EDUCATION

University of California, Berkeley - Haas School of Business Master of Financial Engineering Candidate	3/15 to 3/16
<ul style="list-style-type: none">• Citigroup: Team Project on “Bond Liquidity and Credit Cycle Dependence” – Determining the drivers of bond spread and how it changes over credit cycles.• Team Project: Statistical arbitrage strategy in Emerging Market ETFs.	
Completed CFA Level 3	6/10 to 6/12
SP Jain Institute of Management & Research, Mumbai Post Graduate Diploma in Management, Finance	6/08 to 4/10
Indian Institute of Technology, Kharagpur Bachelor of Technology, Manufacturing Science & Engineering	6/02 to 5/06

SKILLS SUMMARY

- **Finance** - Five years of experience in financial services in credit risk
- **Software/ Financial Database** - C++, Matlab, R, Python, MS Office, Bloomberg, FactSet

EXPERIENCE

Moody's Analytics, Quantitative Research Group (Intern)	10/15 – 1/16
DSP BlackRock Investment Managers Pvt. Ltd., Mumbai, India <i>Assistant Vice President & Credit Analyst, Risk & Quantitative Analysis</i>	1/14 to 3/15
<i>Manager & Credit Analyst, Risk & Quantitative Analysis</i>	11/12 to 12/13
<ul style="list-style-type: none">• Sole analyst responsible for managing credit risk of firm's fixed income portfolio of more than 150 companies. Successfully predicted credit rating changes in portfolio companies thus enabling the firm to better manage risk<ul style="list-style-type: none">◦ Led detailed presentation of credit reports and intelligence on potential deals in weekly credit committee meetings to enable the committee headed by the CIO take informed investment decisions◦ Conducted sensitivity analysis of portfolio companies' performance to various shocks like sharp movement in macro-economic variables, regulatory actions etc.◦ Interacted with CXOs of investee companies, debt arrangers, rating agencies and equity analysts as a part of due diligence of potential deals at investee companies• Created a paper portfolio in R, for generating fixed income paper portfolio with highest risk adjusted returns while meeting all portfolio constraints. Portfolio manager tried to replicate this paper portfolio by actual trades• Developed a quantitative model for identifying issuers with potential credit rating transition. This helped in identifying companies with potential rating changes, thus enabling the firm to take proactive investment decisions	
ICRA Limited (Subsidiary of Moody's Investors Service), Mumbai, India <i>Senior Analyst, Financial Sector Rating</i>	4/12 to 10/12
<i>Analyst, Financial Sector Rating</i>	5/10 to 3/12
<ul style="list-style-type: none">• Managed the end to end Credit Rating Process of ~40 Banks, NBFCs, Brokerage Houses and Financial Institutions• Published detailed industry report on equity brokerage industry	
Sabre Capital Private Equity Advisors Limited, Mumbai, India (Intern)	8/09 to 10/09
<ul style="list-style-type: none">• Evaluated private equity investment opportunities in Clinical Research Organizations• Assessed equity investment opportunities in various real estate and power finance companies	

INTERESTS

- Trekking, Swimming, Tabla (classical musical instrument)

PAVOL LANCARIC

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MOBILE

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EDUCATION

University of California, Berkeley - Haas School of Business

Master of Financial Engineering
Financial Econometrics and Quantitative Finance.

Berkeley, CA

2015 - 2016

University College London

Bachelor of Science (Honours) in Mathematics with Economics
Pure Mathematics (75%), Economics, Statistics.

London, UK

2011 - 2014

INDUSTRY EXPERIENCE

Voltaire Capital

Winter Analyst Intern
Voltaire Capital is a trading business specialized in Fixed Income and Foreign Exchange with offices in Chicago and London.

London, UK

2015 - *cont*

Penta Investments

Summer Analyst
Private equity investment analysis and project management.
Focus on large international healthcare and retail projects.
Valuation, due diligence and investment proposals shadowing.
Portfolio benchmarking, investment status reports and market research.

Bratislava, SK

2012 - 2013

PERSONAL DEVELOPMENT AND INTERESTS

UCL Economics and Finance Society

Vice President
Co-management of one of the leading UK university societies.
Head of finance division, organised over 40 various events and workshops.
Launched a proprietary multifunctional platform with over 2.000 active users.

London, UK

2012 - 2013

London 2012 Olympic Games

NOC Assistant
PA to representatives of sponsor companies.

London, UK

2012

MISCELLANEOUS

Working knowledge of MATLAB, Python and Excel.

Interests include tennis, travelling, politics, science and technology.

EU Citizen, US F-1 OPT holder.

Huibin Li

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EDUCATION

University of California, Berkeley - Haas School of Business
Master of Financial Engineering Candidate

3/15 to 3/16

University of Illinois at Urbana-Champaign
Bachelor of Science in Actuarial Science
Minor in Computer Science

1/11 to 12/13

Independent Team Project

BlackRock: Empirical Estimation of Convexity in the Agency MBS TBA Market

5/16

Passed SOA Course P Exam 1 (09/2012)
SOA Course FM Exam 2 (04/2012)
SOA Course C Exam 4 (02/2014)

SKILLS SUMMARY

- Software Development** – C++, R, Python, Mathematica, Matlab, SAS, VB, VBA
- Financial Analysis Skills** – Familiar with Bloomberg Terminal, Capital IQ, Wind
- Language Skills** – Fluent in English and Mandarin

EXPERIENCE

Gifford Fong Associate, Lafayette, CA

10/15 to 01/16

Financial Engineer Intern

- Working as a spread searching engineer for agency CMO Securities
- Involved with a new daily valuation project tasked with integrating the daily valuation infrastructure into the current structure.

CITIC Securities, Beijing, China

11/14 to 02/15

Research Department Intern

- Collected the historical announcements and research reports regarding Chinese margin trading and updated corresponding statistical summary sheets for senior analysts
- Explored the probability of the annual profit forecasts of listed companies and the changes in the performance expectations for various industries
- Developed a short-term investment strategy using technical analysis methods on Chinese equity market and demonstrated strong positive alpha over the course of history

Ping An Property & Casualty Insurance Company Ltd., Shenzhen, China

5/13 to 8/13

Auto Pricing & Research Actuarial Intern

- Analyzed data with SAS and presented it in a format relevant for pricing, loss reserving and other actuarial analysis
- Supported senior actuaries with various tasks and independently prepared and presented a report regarding auto insurance product pricing and underwriting system
- Produced fine results with attention to detail and creative mind under tight project schedules

ACTIVITIES

Illinois Leadership Center, Leadership Certificate, Champaign, IL
Certified Participant

1/11 to 12/12

- Acquired critical insight into intrapersonal and interpersonal skills through informative leadership retreats

INTERESTS

- Mountain biking, accordion, tennis, and photography

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EDUCATION

University of California, Berkeley - Haas School of Business	3/15 to 3/16
Master of Financial Engineering Candidate	
Baylor University, Waco, TX	8/09 to 5/14
Ph.D. in Physics	
University of Science and Technology of China, Hefei, China	9/05 to 7/09
Bachelor of Applied Physics	

BLACKROCK TEAM STUDY PROJECT

- Event Study Toolbox
- Machine Learning based Topic Detection: Application of Latent Dirichlet Allocation.

5/15 to 10/15

TEAM APPLIED FINANCIAL PROJECT (Winner of Morgan Stanley Applied Finance Project Award)

- Text-based Firm Classification using LDA and Peer Group Momentum Investigation

1/16 to 3/16

- Utilized the LDA method to reduce the 10-K files of company into a 50-dimensional space.
- Used K-means method to classify the topic vectors into 20/50 peer groups.
- Investigated the implicit economic links revealed by LDA and a peer-group based momentum strategy.

EXPERIENCE

Standard & Poor's, New York, NY	10/15 to 01/16
Intern in the Quantitative Analytic Research Group.	
<ul style="list-style-type: none"> • Validate the Multi-lateral Lending Institution model. • Implement the Criteria Evaluation Engine. 	

SKILLS SUMMARY

Finance – passed CFA level 3 exam	06/02/13
Math – Calculus, Stochastic Calculus, Linear Algebra, Function Theory of Complex Variables, Probability Theory and Mathematical Statistics, Ordinary/Partial Differential Equations, Advanced Numerical Linear Algebra.	
Programming – C++/C, Python, Matlab, R, Mathematica, and Fortran (in UNIX).	

RESEARCH

Baylor University, Waco, TX	8/09 to 5/14
<ul style="list-style-type: none"> • Used Polynomial-subtraction method to reduce the variance in disconnected QCD loops. • Used PP-GMRES-DR algorithm to speed the calculation of large matrix systems, especially QCD matrices. • Investigated multi-quark states by using the non-relativistic Thomas-Fermi Quark Model. <ul style="list-style-type: none"> ➢ Derived the ODE of multi-quark density function based on Thomas-Fermi quark model. ➢ Derived analytic form of the multi-quark system energy. ➢ Using adaptive grids algorithm to calculate the numerical value for Kinetic and Potential energy of the system. 	
University of Science and Technology of China, Heifei, China	9/05 to 07/09
<ul style="list-style-type: none"> • Simulated particle-in-cell model using Monte-Carlo method. • Ran LPC++ program on LINUX. 	

PUBLICATIONS

- **Thomas Fermi quark model: non-relativistic aspect**, Annals of Physics, Volume 341, February 2014, 164-182.
- **Polynomial preconditioned GMRES and GMRES-DR**, SIAM J. SCI. COMPUT, Vol. 37, No. 5, pp. S407-S428.
- **Perturbative subtraction method**, in progress.

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EDUCATION

University of California, Berkeley - Haas School of Business, GPA 3.96/4.0	3/15 to 3/16
Master of Financial Engineering Candidate	
University of Toronto – Rotman School of Management	9/13 to 12/14
Took 5 Ph.D. level courses and projects related to asset management	
University of Toronto, GPA 3.85/4.0	9/11 to 8/13
Master of Applied Science in Industrial Engineering (Field: Operations Research)	
Publication – “A Stochastic Model for Tumor Geometry Evolution During Radiation Therapy In Cervical Cancer.” <i>Medical Physics</i> , 41.2 (2014): 021705.	
City University of Hong Kong, GPA 3.93/4.0	9/07 to 7/11
Bachelor of Science (First Class Honors) in Computing Mathematics	
Publication – “Cost Optimization for Canary-Equipped Electronic Systems in Telemedicine: Inventory Control and Maintenance Decisions.” <i>IEEE Transaction on Reliability</i> , 61.2 (2012): 466–478.	
Passed CFA Level I, 12/14	

EXPERIENCE

BlackRock Inc., Multi Asset Strategies, San Francisco, CA	10/15 to 1/16
Intern	
Princess Margaret Cancer Centre, Toronto, ON, Canada	1/12 to 12/12
Research Intern	
• Performed cluster and regression analysis on tumor data to study tumor growth rates relative to tumor size.	
• Created a dynamic model with a Bayesian updating scheme to predict tumor evolution using all available tumor-specific observations.	
• Received the Best in Physics at the American Association of Physicists in Medicine 56 th annual meeting	

INDUSTRY PROJECTS

Convergent Investment Management (Hedge Fund in San Francisco)	3/15 to present
• Developed fair value models for funds combining a data-mining approach with qualitative analysis.	
• Constructed transaction cost models and reduced costs for a statistical arbitrage strategy.	
BlackRock Inc. (Team of 5)	4/15 to present
• Predicted and decomposed the term structure of interest rate.	
MarketPsych LLC (Consulting Firm in Santa Monica, Team of 4)	8/15 to present
• Constructed a model using market sentiment to facilitate asset allocation in commodity market.	

SKILLS SUMMARY

- Data Mining Research** – Four-year experience in model development for finance and medical research
- Software Development** – Python, MATLAB, R, C++, Java
- Leadership/Communication Skills** – Advanced Leader & Communicator Bronze, Toastmasters International
- Language Skills** – Fluent in English, Mandarin, Cantonese

INTERESTS

- Public speaking (Co-founder & President, Toronto Engineering Club of Speakers, Toastmasters International)
- Chinese zither

EDUCATION

University of California, Haas School of Business, Berkeley, CA	03/2015 – 03/2016
• Master of Financial Engineering Candidate, Expected March 2016. GPA: 3.91/4.00	
Northwestern University, Evanston, IL	09/2007 – 06/2011
• Bachelor of Science in Biomedical Engineering • Minor in Economics	

TECHNICAL EXPERIENCE

Projects

Team project in collaboration with Citigroup	04/2015 – 10/2015
Design and analyze two long/short trading strategies:	
• Equity Relative Value trade based on risk premium of individual stocks in the S&P500 • Debt-Equity Risk Premium trade using CDX.HY, CDX.IG indices and the S&P500	

Finance Blog - thecautiousbull.com	08/2013 – 01/2015
• Personal blog encompassing a collection of trading ideas and commentary on stocks and the markets	

Skills Summary

- Programming Languages: Python, Matlab, R, C++, VBA
- Asset Valuation: Monte Carlo Simulations, Binomial Trees, Finite Differences
- Project Management: Requirements Gathering, Milestone Timelines, Deliverable Presentations
- Bloomberg Aptitude Test: 650 (98th percentile)

EMPLOYMENT

Stout, Risius, Ross	10/2015 – 12/2015
Intern, Complex Securities and Value Analysis	

- Develop valuation models to value financial instruments using option pricing theory, interest rate and credit models, Monte Carlo simulation, binomial trees, and other financial engineering techniques
- Prepare reports communicating findings and recommendations to current and prospective clients

Accenture	07/2011 – 02/2015
Sr. Analyst, M&A IT Consultant	03/2013 – 02/2015

- Led application integration activities for global acquisitions
- Assessed one-time integration and annual recurring costs related to Accenture acquisition targets
- Performed data analysis to provide IT post-merger integration strategy recommendations to senior management
- Aligned post-merger integration strategy with new governance requirements in four months

Analyst, Product Test Lead	08/2012 – 02/2013
• Produced and coordinated testing on 600+ application use cases for largest SAP integration initiative in company history	

- Reduced impactful production defect count by 68% in six months
- Managed 16 employees (Chicago and Buenos Aires)

Analyst, Tester	07/2011 – 07/2012
• Lead tester in Global Compliance initiative go-live for 60+ countries	

- Published bi-weekly closure reports with defect and release status metrics for leadership

MENGDAN MA

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EDUCATION

University of California, Berkeley – Haas School of Business

March 2016

Master of Financial Engineering

- Industry Team Project with BlackRock-Liquidity and Positioning Measurements in Agency MBS OTC Market Using TRACE Data

University of California, Berkeley

2010- 2014

B.A. Statistics || B.A. Computer Science

SKILLS

Programming: R, MATLAB, SQL || Java, Python, C, C++

WORK EXPERIENCE

BlackRock Inc., Model-Based Fixed Income Alpha Team

San Francisco, CA

10/2015 – 01/2016

Portfolio Management & Research Associate Intern, Emerging Market Rates Desk

BlackRock Inc., Model-Based Fixed Income Alpha Team

San Francisco, CA

06/2014 – 01/2015

Research Strategist Analyst Intern, Agency Mortgage Desk

- Developed a systematic trading strategy on specified pools for a portfolio of nation-hedges with TBAs and Treasury Futures, from the ground up. This strategy went live in January 2015.
- Hands-on experience with systematic investing through research and implementation of alpha models, portfolio construction, risk models, transaction cost and liquidity models in spec pool space.
- Analyzed economic relations between prepayment speeds, economic drivers, set up and entry of spec pools, and modeled those interactions. Created four fundamental-driven trading signals from this phase of research.

Goldman Sachs, Technology Division

New York City, NY

05/2013 – 08/2013

Summer Analyst, Market Surveillance Team, Compliance Technology

- Analyzed statistical patterns of individual and departmental user behavioral behavior in E-Communication data using regression and machine learning methods, and researched new features for trading compliance.
- Developed a data format transformation tool for generating regression tests in R. Improved productivity by a factor of 5.
- Designed and implemented a new Restriction Rule Catalog to generate rule based surveillance off legacy trading restriction database to a compliance strategic firm wide database. Transferring cache and surveillances through FitNesse framework to ensure no regression was introduced as part of change.

SAP Labs, LLC, Business Analytics Technology

Palo Alto, CA

05/2012-08/2012

Software Developer Intern, Business Analytics Technology

- Designed a new feature “Automatic Derivation Rule Generation Using Profiling Statistics” in a data cleaning web application. SAP has filed patent for this feature. Patent No. US20140081931A1
- Delivered this feature into production at the end of internship which significantly simplified users’ workflow and created notable increasing in client’s efficiency
- Analyzed profiling statistics. Customized and implemented Grubbs Outlier algorithm in Java to detect outliers in profiling statistics

Ernst & Young, IT Risk and Assurance Department

Hubei, China

12/2011-01/2012

IT Risk and Assurance Winter Analyst

- Analyzed clients’ financial data. Prepared Journal Entry, Trial Balance Report and IT Assurance Report with CAATs
- Assisted clients by evaluating business and technology alignment, enterprise security, risk process etc. and provided metrics

RESEARCH EXPERIENCE

Center for Information Technology Research In the Interest of Society (CITRIS), UC Berkeley

Berkeley, CA

01/2013–05/2014

Research Assistant with Prof. Laurent El Ghaoui – StatNews Project

- Researched and implemented Gradient Lasso algorithm in Matlab, C and Python to discover correlated and significant news terms
- Analyzed sparse data scripted from online news and performed accuracy analysis of algorithms on the finance and literature data

Haas School of Business, University of California, Berkeley

Berkeley, CA

01/2011-06/2011

Research Assistant with Prof. Waverly Ding

- Analyzed the stock option exercise behaviors in Asian Markets in terms of how competitions affect innovative activities

ACTIVITIES

Vice President and Chair of Activity Department in BCSSA; Consultant Associate in Net Impact || Badminton; Basketball

CHETAN MEHTA, FRM

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EDUCATION

University of California, Berkeley - Haas School of Business

Master of Financial Engineering Candidate

March 2015 - March 2016

- **CITI: Fixed Income Currency & Commodities** (Group Project, 5 members)

Relative value strategy to outperform investment-grade and emerging market sovereign bond indices

Indian Institute of Management, Indore

June 2009 – March 2011

Post-Graduate Diploma in Management

- Ranked 7 out of 240 incoming students and recipient of '*O.P. Jindal Scholarship for Academic Excellence*'

University of Delhi - Netaji Subhas Institute of Technology

July 2004 - June 2008

Bachelor of Engineering in Electronics and Communications

Software Skills – C++, MATLAB, R, Python and VBA

CERTIFICATIONS

- **Chartered Financial Analyst (CFA)** – Passed all three levels in first attempt; Awaiting Charter
- **Financial Risk Manager (FRM)** – Passed both levels in first attempt
- **The Institute and Faculty of Actuaries, UK** – Passed five core-technical (CT) examinations in first attempt
 - CT1:** Financial Mathematics
 - CT2:** Finance & Financial Reporting
 - CT8:** Financial Economics
 - CT3:** Probability & Mathematical Statistics
 - CT7:** Business Economics

INTERNSHIP

Morgan Stanley UK Ltd, London

Oct. 2015 – Jan. 2016

Intern - Credit Valuation Adjustment (CVA) Desk, Risk Management Group

EXPERIENCE

ICICI Bank, Hyderabad

Nov. 2012 – Feb. 2015

Manager - Derivative Structuring and Sales Group

- Managed 30 corporate client (Turnover >USD 500.0 million) relationships for their treasury requirements
- Priced and executed Currency and Interest Rate structured derivative trades for clients in Murex 3.1
- Prepared numerous pitch books with hedge strategies, pricing indications, and specific market colour
- Organized conferences, market seminars & off-site visits for fostering deep relationship with clients
- Conducted credit appraisal, sensitivity analysis, post deal tracking of MTM and advised clients for unwinds
- Exceeded treasury revenue targets (South India) for FY14 and FY13 by 45% and 32% (yoY) respectively

ICICI Bank, Mumbai

June 2011 – Oct. 2012

Manager – Risk Management Group

- Incorporated Credit Valuation Adjustment (CVA) charge in OTC derivative valuation and capital requirements
- Estimated Probability of Default (PD) using structural approach to model credit risk
- Established Potential Future Exposure in Interest Rate Swaps by modelling USD Libor term structure using two-factor Heath-Jarrow-Morton Model (HJM) Model in MATLAB
- Developed proprietary models for credit rating of sovereigns and financial institutions (Basel II 'IRB')
- Implemented quantitative model for pricing Credit Default Swaps in MATLAB
- Delineated change in client's credit profile due to redemption of External Debt under steep INR depreciation

Just Punjab Web Technologies, Noida – Indian subsidiary of Altos Inc.

June 2008 – Jun 2009

Manager - Operations

- Set up operations in India for outsourcing of Medical Transcription and Billing services for Altos Inc.
- Laid down infrastructure, recruited and led a team of 15 Quality Analysts and 64 Medical Transcriptionists

INTERESTS: Enjoys listening to Music, playing Cricket and Table Tennis, and Cooking

Akshay MISHRA

2175 Decoto Road, Apt 155, Union City, CA 94587, United States

Contact: +1-510-556-7597, akshay_mishra@mfe.berkeley.edu, Work Authorization: United States

GitHub: <https://github.com/photongl> | Kaggle: <https://www.kaggle.com/topquark>

Education

Master of Financial Engineering Candidate, Haas School of Business, University of California Berkeley, USA

Mar, 2015 – Mar, 2016 (expected)

- **Team Project:** Use large-scale text-mining and high-dimensional feature-extraction from SEC filings to forecast inputs such as returns-on-equity for a probability-of-default model for a leading investment bank
- **Courses:** Empirical Methods in Finance, Optimization Models, Stochastic Calculus

MSc Finance and Economics, London School of Economics and Political Science, UK

2009 – 2010

- Courses: Financial Economics, Advanced Econometrics, Financial Econometrics

B. Tech. (Hons.), Mechanical Engineering and M.Tech, Thermal Energy & Environmental Engineering, IIT Kharagpur, India

2003 – 2008

Industry Experience

Indus Capital, New York, USA – Quantitative Analyst (Intern)

Oct. 15 – Dec. 2015

Created and validated investment ideas using statistical modelling and data-mining techniques.

- Modelled impact of local competition for a restaurant-chain using geolocation data and social media reviews
- Created a sales-prediction model for a health and fitness chain by using search-engine popularity of certain keywords associated with its product offerings

UBS Investment Bank, London, UK – Quantitative Analyst (Associate Director), Risk Management Credit Nov. 2010 – Aug. 2014

Created statistical forecasting models and optimization solutions for portfolios of institutional clients such as pension funds, hedge funds and insurance firms:

- **Spread/Volatility forecasting:** Performed time-series modeling (VAR) using R to forecast spreads for single/multi-name credit derivatives to inform investment strategies for hedge-fund clients. Created and calibrated an implied volatility model and a volatility forecasting model for credit-index options
- **Tranche classification:** Designed an SVM-based classifier to assign ratings to index-tranches
- **Monte Carlo risk:** Built and calibrated multi-variate copula models using R and SQL to simulate and predict portfolio returns/risk for large pension-funds with millions of positions. Created metrics to characterize factor-risk intuitively

CQS Investment Management Ltd, London, UK – Summer Intern, Quantitative Research

July 2010 – Sep. 2010

- Implemented simulations in C++ for calculating counterparty-risk measures (EE, PFE) for OTC positions
- Developed macroeconomic stress indices using PCA to predict funding stress for the firm arising due to volatility/liquidity

Barclays Capital, Singapore – Graduate Business Analyst, Emerging Markets Rates IT

June 2008 – July 2009

Worked with the internal strategic project management group initiating and delivering key projects:

- Set up an on-shore Treasury Asset/Liability management trading desk in India
- Set up an on-shore trading desk and operations for FX, MM and vanilla-rates trading in Indonesia
- Also worked as an intern in the firm in the IT Central Operations team developing business intelligence tools for production-incident management and root-cause analysis using C# and SQL during May – July, 2007

Centre for Quantum Computation, University of Cambridge, UK - Summer Intern

- Developed algorithms using C++/OpenGL and GLSL shaders for simulating measurement and control phenomena in quantum systems on the GPU in real-time

Additional Skills, Awards and Extracurricular Activities

May – July, 2006

- **Programming Languages/Frameworks:** C++, C#, SQL (Postgres), R, Python - scikit-learn, H2O, Apache Spark
- Awarded “Best Thesis” for post-graduate dissertation by Department of Mechanical Engineering, IIT Kharagpur
- MOOCs: Machine Learning (Stanford), Big Data with Apache Spark, Scalable Machine Learning (Berkeley)

FLORIANE MOY

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EDUCATION

University of California, Berkeley - Haas School of Business

3/15 to 3/16

Master of Financial Engineering Candidate

- Academic project: "Volatility forecasting using machine learning techniques".

ENSAE ParisTech, Paris Graduate School of Economics, Statistics and Finance

9/12 to 6/14

MSc and BSc in Applied Mathematics, Statistics and Economics (dual degree with the MFE)

SKILLS SUMMARY

- **Finance** – One year of quantitative analysis experience.
- **Software Development** – R, Python, SciLab, VBA and C++ in Microsoft Windows environment.
- **Leadership/Communication Skills** – Team leader during academic projects, headed the organization of humanitarian actions in the university, president and treasurer of two student associations.
- **Languages** – Fluent in French, German and English.

EXPERIENCE

American Century Investments, Mountain View, CA

10/15 to 1/16

Investment Analyst Winter Associate

- Investment Management Winter Associate Program in the Asset Allocation Department.

AXA, Nanterre, FRANCE

12/14 to 3/15

Junior Engineer in the Risk Management Department

- Led actuarial sciences studies to develop and improve projection tools in protection and group pensions.
- Managed the studies for the ACP (Annual Premium) of the French supervisory authority in the insurance field.

Milliman, Paris, FRANCE

6/14 to 12/14

Consultant in the R&D Department

- Led a project on Weighted Monte Carlo methods and their applications in insurance risk management.
- Managed research activities on yield curve forecasting, using the Nelson-Siegel approach.
- Developed a tool on non-linear inflation modeling (historical analysis on inflation dynamics and implementation of a scenario generator based on PCA techniques).
- Co-created a tool, focusing on the risk neutral environment (credit spread modeling using the JLT model, ZC rates diffusion using the 2 FV model).

Exane Banque, BNP Paribas, Paris, FRANCE

9/13 to 5/14

Year-long academic team project on Portfolio Management

- Led a team of four students to develop an optimal trading strategy on R, using the financial analysis.
- Worked on the classification and scoring methods in Statistics, and on trading strategies and stochastic control in Finance.

IG Markets, Düsseldorf, GERMANY

6/13 to 7/13

Quantitative Summer Analyst

- Led statistical studies on trading activities, trained to financial markets.

INTERESTS, AWARDS

- Tutoring, traveling and playing basketball and rugby.
- 2015: The MFE Ekaterina Kate Matrosova Award for Leadership.

M S MANJUNATH

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EDUCATION

University of California, Berkeley - Haas School of Business	2015 – 2016
<i>Master of Financial Engineering Candidate - 3.96/4.0</i>	
Indian Institute of Management, Lucknow	2010 – 2012
<i>Post Graduate Degree in Management, Finance - 8.04/10 (Top 5%)</i>	
– Highest grade (A+) in Financial Optimization, Investment Management, Corporate Valuation and Accounting	
– Academic Paper on Determinants and impact of Environmental, Social, Governance (ESG) Disclosures on shareholder wealth accepted at International Conference on Economics & Finance IBS Bangalore, Jan 12	
Indian Institute of Technology, Madras	2004 – 2008
<i>Bachelors of Technology, Electrical Engineering - 9.2/10 (Top 5%)</i>	
– Awarded Certificates of Merit from IIT Madras and Government of India for academic excellence	
– All India Rank 272, State Rank 31 in Engineering Admissions process among 150,000 candidates	
CFA Level 1	2010

SKILLS SUMMARY

Finance: Rates & Fixed Income, Option Trading, Macro Research, Risk Management

Programming: C++, MATLAB, Excel VBA, Python, R

Leadership / Communication Skills: Conducted training workshops; led campus hiring program at DB

PROFESSIONAL EXPERIENCE

Sun Trading LLC, Chicago	Internship	Oct 2015 – Jan 2016
Research and development of new trading models, updating trading strategies based on market conditions		
Deutsche Bank Group, Mumbai		Apr 2012 – Mar 2015
<i>Singapore Rates Options Trading Desk – Supported with Pricing and Risk activities for Rates and Hybrid trades</i>		
<u>Trade Flow</u> <ul style="list-style-type: none">Generated weekly market views and macro trade ideas to target hedge fund clientsDeveloped trade strategies based on Event Analysis, Correlation trend exploration, news impact analysisDeveloped a framework for dynamic skew calibration to improve the pricing of KRW SwaptionsBuilt a model for broker quote analysis that identifies relative mispricing and trade positioning		
<u>Risk related/daily activities</u> <ul style="list-style-type: none">Risk analysis for rates and hybrid books with risk aggregation feature, pnl estimation, scenario analysisMonitored the barrier risk metrics for FX and underlying risk in hybrid books		

Deutsche Bank Group, Mumbai	Apr 2011 – Jun 2011
<i>Intern with Rates Option Trading Desk (Pre-placement offer for excellent performance)</i>	
<ul style="list-style-type: none">Created a framework for scenario analysis of trade pay-off, based on historical dataDeveloped a risk-reversal trading strategy that uses a break-even skew metric for a view on volatility skew	

Cisco Systems, Bangalore	Aug 2008 – Jun 2010
<ul style="list-style-type: none">Worked on Improvement of packet classification engine for better traffic prioritization and network securityAddressed network scalability issues by adapting the LAN software modules to the new IPv6 standardWon the 'Cisco Achievement Program' award for the timely delivery of high quality projects to the customers	

ACHIEVEMENTS & INTERESTS

- An ardent Rubik's cube solver. Conducted workshop to teach the art of Rubik's cube solving
- 3rd place in Robotics event in the engineering fest, IIT Madras
- 2nd in Chakravyuh, an event testing various aspects of finance held at IIM Lucknow, among 200 students
- Travelling, avid interest in World history, music

PIERRE-ALEXIS PANEL

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EDUCATION

University of California, Berkeley - Haas School of Business	3/15 to 3/16
Master of Financial Engineering Candidate Current GPA: 4.0/4.0	
Ecole Centrale de Paris	9/08 to 12/11
Master Degree, Applied Mathematics	
Series 7, 63 and 55	10/12

SKILLS SUMMARY

- **Equity Derivatives** – two years of work experience as trading assistant junior trader
- **Programing languages** – C++, VBA, Matlab, Octave, Python and R
- **Languages** – Fluent in English and French

EXPERIENCE

Goldman Sachs, Investment Management Division, NY	10/15 to 1/16
Winter Internship, Quantitative Investment Strategies	
BNP Paribas Securities Corp, NY	9/12 to 2/14
Junior Trader, Dispersion Trading Desk	
• Priced clients' request and hedged positions' risk in market	
• Developed Front office tools for risk calculation and reconciliation	
• Created and implemented automation scripts for electronic trading	
• Managed books (exercises, gamma hedging, cash flow validation, expiry process) daily	
Winego, Paris	11/11 to 5/12
Junior Consultant	
• Optimized customer relationship by developing tools for business units change follow-up	
• Created scoring methods for companies or business units.	
Societe Generale, Paris	5/11 to 11/11
Trading Assistant, Stock Flow Trading	
• Fitted implied volatility smile graphs using market data	
• Updated and gathered information on underlying companies (ex-dates, earnings)	
• Created, implemented and backtested pair-trading strategies following mean-reverting or trend-following scenarios.	
Axa France, Paris	9/10 to 4/11
Part-time analyst, Solvency II team	
• Studied the impact of the new Solvency II norm on the profitability of Axa's offers.	
• Developed, modelled and implemented financial or sanitary shocks on tables of mortality or rate	
• Studied the impact of the shocks on solvency capital and features of Axa products	

INTERESTS

- Soccer, golf and traveling

NIKHIL PARANJAPE, CFA

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EDUCATION

University of California, Berkeley - Haas School of Business Master of Financial Engineering Candidate	03/15 to 03/16
Project for Citigroup: "Bond Liquidity and Credit Cycle Dependence" (team of 5)	
Chartered Financial Analyst, CFA Institute, USA. Successfully cleared all 3 levels in 1 st attempt	12/08 to 06/10
Management Development Institute, Gurgaon, India Post Graduate Diploma in Management – Finance & Marketing; CGPA 7.04/10	06/06 to 03/08
Institute of Engineering & Technology, Indore, India Bachelor in Engineering - Electronics & Telecommunication, 76.69% (1 st class, Distinction)	07/01 to 05/05

EXPERIENCE

BlackRock, San Francisco <i>Intern, Risk & Quantitative Analysis</i>	10/15 to 01/16
ICICI Prudential Asset Mgmt Co Ltd, Mumbai, India <i>Co-Fund Manager & Research Analyst, Fixed Income Investment</i>	12/12 to 02/15
<ul style="list-style-type: none">Managed ICICI Prudential Corporate Bond Fund and Regular Savings Fund with Assets under management of over \$1.1BN, and multiple close ended Fixed Maturity Plans with a average AUM of \$15-20MN eachMade investments of over \$500MN in a year which increased share of AAA assets by ~15 percentage ptsPerformance turnaround in one year by reducing spread with peers by 100 basis points (bps); increased spread over AAA by ~30 bps in both the funds despite contraction in spreads between AAA and non-AAACredit research & investment research compilation for 20+ entities under coverage across various sectors	
ICRA Limited, Mumbai, India <i>Senior Analyst, Banking and Financial Sector Group</i>	4/08 to 11/12
<ul style="list-style-type: none">Rated over \$5BN of short term and long term debt for more than 15 entities in financial sector across banks, non banks finance companies (NBFC), insurance companies, mutual funds (MF) & financial institutions.Built organizational capabilities in rating financial sector entities by training a team of 4 analystsPublished first report on Indian Auto Industry & the first NBFC sector report based on extensive researchManaged client relationship and handled investor queries	12/10 to 11/12
Analyst, Structured Finance Group (SFG)	04/08 to 03/11
<ul style="list-style-type: none">Credit Rating Analyst for several Asset Backed Securitization (ABS) & Mortgage Backed Securitization (MBS) transactions originated by over 15 issuersAnalyzed portfolio quality of Tata Motors Finance, captive financier of the largest vehicle manufacturer in India and presented the analysis to client's top management; the analysis formed a key input in business plans and credit policyPublished the first research publication on default study and rating transitions pertaining to SFG in 2009.Developed an excel based financial model for Collateralized Debt Obligation (CDO) transactions	

SKILLS SUMMARY

- Finance** – over seven years of fixed income credit analysis and fund management experience.
- Software Development** – C++, R, Python.

ACHIEVEMENT & INTERESTS

- Awarded National Talent Search Examination scholarship by National Council of Educational Research & Training, an organization set up by Government of India (2001)
- Singing and listening to light Indian music, and playing badminton

EDUCATION

UNIVERSITY OF CALIFORNIA, BERKELEY – Haas School of Business	2015 – 2016
Master of Financial Engineering Candidate.	
Relevant courses: Stochastic Calculus, Quantitative Asset Pricing, Econometrics, Credit Risk Modeling, Fixed Income Markets.	
<i>MFE industry team project with CITIGROUP – alpha generating trading strategies using credit information:</i>	
<i>Implemented and backtested two strategies: momentum and capital structure arbitrage.</i>	
ECOLE CENTRALE, France – Valedictorian.	2012 – 2014
Master of Science in Applied Mathematics – Bachelor of Science in Engineering.	
Relevant courses: Advanced Statistics, Financial Mathematics, Economics, Corporate and Accounting Finance.	
<i>Ecole Centrale industry team project with FAURECIA – Database transfer from Excel to Access.</i>	
COLLÈGE STANISLAS, France – Ranked top 1% at the national competitive entry exam for prep schools.	2009 – 2012
Classes Préparatoires – Acquired a strong background in Mathematics, Physics and Software design.	

SKILLS

Languages	French: native speaker. English: fluent. Spanish: bilingual (mother's tongue). Italian: fluent (father's tongue). Mandarin: advanced level – 6 months immersion in China after 4 years of study.
Programming	Proficient with Languages Python, Matlab and C. Talent for rapidly mastering new informatics and technologies. (eg: created of a board game in C and developed part of a website in HTML & CSS).
Communication	Motivated team player, excellent communication skills and ensuring on-time delivery. (eg: Faurecia and Citi projects).

WORK EXPERIENCE

MOODY'S, San Francisco	2015
Credit Risk Modeling Quantitative Intern.	
ROTHSCHILD & CO IE – <i>Paris, France</i>	
European Equity Analyst – Corporate M&A Services.	2014
Gained hands-on experience on working closely with the 11 persons of the trading floor, deepened my understanding of financial markets and developed better market intuition.	
<ul style="list-style-type: none">• Equity stock follow-up and explanation of performance for CAC40 companies.• Updated and developed valuation models on stocks : key accounts, DCF, comparables, SOP, forecasts, ratios.• Implemented different techniques, such as backtest, Monte Carlo Simulation and Fourier Analysis.• Optimized and automated monitoring alerts and closing-fixing report completion.• Analyzed and communicated financial news relevant to monitored companies to the team.	
BESALCO, Santiago, Chile	
Financial Controller Intern.	2013
<ul style="list-style-type: none">• Assisted Financial Controller with accuracy of Financial Statements.• Recorded financial transactions, prepared and reviewed account analysis.	

INTERESTS

Sports	Kung-Fu	Black Belt – trained in the Shaolin Temple in China for 3 months. Participated in the 2014 World Championships in China. Coached and trained students in Paris.
	Table tennis	France Team Champion (2005, 2006, 2007). Paris Vice Champion (2006). Île de France Vice Champion (2006).
Magic		President of the Magician Club at Ecole Centrale. Member of the French Federation of Magician Artists.

NARUT PRAMOJANEY

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EDUCATION

University of California, Berkeley, CA – Haas School of Business

3/15 to 3/16

Master of Financial Engineering

- Pre-program courses: Statistics, Math Foundations, and C++ Programming
- Pinnacle Ventures Team Project: Applied gradient boosting on credit risk of technology startup companies
- Applied Finance Team Project: Forecasted oil price volatility using support vector machine and GARCH

Chulalongkorn University, Bangkok, Thailand

5/09 to 3/13

Bachelor of Engineering in Computer Engineering, GPA 3.87/4.00 (First Class Honors)

- Top 5% of Computer Engineering Class

Passed CFA Level I Exam

12/14

SKILLS SUMMARY

- **Finance** – Knowledgeable in corporate finance and financial engineering, experienced in equity and derivatives
- **Computer Skills** – R, MATLAB, Python, Slang, Excel VBA, C++, Java, C#, SQL, AngularJS, Machine Learning
- **Software and Market Data** – Bloomberg, Datastream
- **Language Skills** – English (Proficient), Thai (Native)

EXPERIENCE

The Goldman Sachs Group, Inc., New York, NY

10/15 to 1/16

Capital Measurement & Analytics Intern

- Developed web-based tool to map portfolio projection with parameters for risk-weighted asset calculation
- Enhanced CCAR inputs submission using Excel VBA

Phatra Securities PLC (Formerly Merrill Lynch Phatra Securities), Bangkok, Thailand

4/13 to 1/15

Quantitative Trader, Hedge Fund Department

- Executed all equity and derivatives orders following market neutral quantitative model
- Developed, launched, and managed algorithmic trading system
 - Managed execution for Thailand and Asia excluding Japanese portfolios
 - Launched advanced VWAP algorithmic trading strategy
 - Researched new intraday trading volume forecasting method to enhance VWAP trading strategy
- Designed tools to streamline portfolio rebalancing process
 - Created tool to analyze equity bid ask spreads for transaction cost models using trading data
 - Implemented automatic website extractor for trading signal
 - Built Bloomberg data extraction tools for checking data and creating reports
- Improved the stock selection model performance

Infosys Limited, Bangalore, India

3/12 to 6/12

InStep Intern

- Developed a cross-platform game in Java

OTHER

- Semifinal (Last 50 teams worldwide) – Imagine Cup 2011 Game Design: Windows/XBOX (XNA) by Microsoft Corporation (C#)
- 2nd Runner-up – Thailand Robot@Home Championship 2011 (C++)

BISWARANJAN SAHU

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EDUCATION

University of California, Berkeley - Haas School of Business 3/15 to 3/16
Master of Financial Engineering Candidate

Indian Institute of Technology (IIT) Kharagpur, India 8/04 to 5/09
Master and Bachelor in Aerospace Engineering
Awarded Best Dual Degree Project for Master's thesis work in computational nanotechnology

Passed CFA Level 1 & Level 2 from CFA Institute, US

SKILLS SUMMARY

- **Finance** – 5 years experience in statistical & quantitative analytics in consumer credit space
- **Programming Skills** – C++, Python, Matlab, R, SAS, SQL
- **Software Packages** – Tableau, SiteCatalyst

APPLIED FINANCE PROJECT

Stochastic Spread & Default Transitions, Citi Quantitative Credit Modeling Group 4/15 to 9/15
• Develop a stochastic model to estimate unexpected losses on corporate bonds by incorporating stochastic default rates, corresponding recovery rates and stochastic credit spreads.

EXPERIENCE

Standard & Poor's, New York 10/15 to 1/16
Associate (Intern), Quantitative Analysis Research Group

Capital One Financial, Bangalore, India 5/12 to 3/15
Senior Associate/ Business Analyst (Credit Card)
• Created a Classification & Predictive Model using regression and text-mining techniques to identify key customer segments which have a very high propensity to file regulatory complaints.
• Designed and implemented anti-money laundering strategy in the system to identify potential customers who may be using their credit cards to launder black money.

HSBC Global Analytics, Bangalore, India 8/10 to 4/12
Analyst (Credit Cards & Retail Partnerships)
• Led the Indian team efforts in One-HSBC project which unified credit card & retail data infrastructure into a common platform and was given **One-HSBC Award** for the same.

Indian Register of Shipping, Mumbai, India 6/09 to 7/10
Assistant Surveyor (Research & Development)
• Designed and developed a software module in Visual C++ which is being used to verify whether the ship designs comply with various structural rules and regulations set forth by marine societies.

Barclays Capital, Singapore 5/08 to 7/08
Analyst Intern (Regulatory IT)
• Developed and enhanced a financial application used for the regulatory reporting of trading transactions.

INTERESTS

- Badminton, Soccer, Chess and Traveling.

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US GREEN CARD HOLDER

EDUCATION

University of California, Berkeley – Haas School of Business	3/15 to 3/16
Master of Financial Engineering Candidate	
<ul style="list-style-type: none">• Team project with Mellon Capital – “Risk premia in emerging market sovereign debt” (Python)• Team project with BlackRock – “Predicting and decomposing the term structure of interest rates”• Arthur Qi scholarship	
Australian Graduate School of Management	01/12 to 03/14
Graduate Diploma in Management	
<ul style="list-style-type: none">• Student exchange to Kellogg School of Management, Northwestern University (C/C++, Python, MatLab, CVX, UNL, Mathematical Economics)• Kellogg project — statistical arbitrage, co-integration, and robust optimization (Python, MatLab)	
University of Sydney	01/00 to 12/03
Bachelor of Commerce (1 st class honors in economics)	

SKILLS SUMMARY

- Macroeconomics – over seven years experience as a central bank macro-economist
- Programming – C/C++, Python, R, MatLab, CVX, UNL, Mathematical Economics
- Financial markets – experience on both sell side (FX strategist) and buy side (portfolio manager)
- Leadership – led research teams of up to seven people in both public and private sectors

PROFESSIONAL EXPERIENCE

Citadel LLC, Toronto, Canada (internship)	10/15 to 1/16
Quantitative Research Analyst	
<ul style="list-style-type: none">• Develop systematic macroeconomic trading strategies (VBA and Unix)	
ANZ Banking Group, Sydney, Australia	12/11 to 10/13
FX Strategist	
<ul style="list-style-type: none">• Developed state-of-the-art macroeconomic models to forecast G10 FX (VBA, Python)• Created research that improved ANZ Economic team's rankings in AsiaMoney & EuroMoney polls• Delivered speeches to over 100-person audiences on economies of China and Australia• Produced over 100 FX trade recommendations, generating substantial sales revenues• Bank spokesperson for FX markets: appeared regularly on television or in print (Bloomberg, Sky, WSJ, FT)• Led cross-functional marketing team to major central banks in South America, on-boarding new clients	
The Reserve Bank of Australia, Sydney, Australia & New York, NY	09/04 to 11/11
Economist	
<ul style="list-style-type: none">• Managed & developed the bank's suite of econometric models for the net exports sector (includes error-correction models, ARIMA models, GARCH models - mostly EViews & Stata, some MatLab)• Led a team of three economists & four research assistants; prepared Board briefings for monetary policy• Drafted three speeches for board members• Managed USD15 billion fixed income portfolio of sovereign reserves; discretion of USD70k DV01• Intervened in FX markets in 2008, transacting USD200 million in 2 days in the wake of the Lehman default	

ADDITIONAL INFORMATION

- Dual citizenship - Australia & United Kingdom
- Memberships: CFA Institute, New York Society of Securities Analysts (NYSSA), International Association for Quantitative Finance (IAQF)
- Interests include surfing, triathlon, cycling, and travelling (visited 48 cities in 31 countries)

Roham Sameni

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EDUCATION

University of California, Berkeley - Haas School of Business
Master of Financial Engineering Candidate

Mar 2015 – Mar 2016

University of British Columbia, Vancouver, B.C., Canada
B.A.Sc., Electrical Engineering, Graduated with Distinction
The Undergraduate Student Research Award (2011)

Sep 2010 – May 2014

EXPERIENCE

Sensato Investors, San Francisco
Intern - Quantitative Analyst

Oct 2015 – Present

- Analyzing the portfolio and generating reports regarding performance and risk evaluations.
- Leveraging statistical methods and machine learning techniques for text processing.
- Providing support to portfolio managers in research and live trading of quantitative strategies.

PMC-Sierra, Vancouver, BC, Canada
Intern - Product Design Engineer

Jan 2013 – April 2013

- Detected the system bottleneck of a micro-controller by analyzing the performance and compared it with the simulation results.
- Suggested an architectural solution that improved the bandwidth utilization of the product by 50% and increased efficiency.

Patrixa Inc., Los Angeles, CA, USA
Intern - Artificial Intelligence Researcher

May 2012 – Aug 2012

- Resolved entity name mismatch by leveraging Natural Language Processing algorithms for over 10,000 corporate names.
- Optimized algorithm's comparison loops and gained 65% speed-up on processing time without sacrificing precision.

Tantalus Systems Corp., Vancouver, BC, Canada
Intern - Test Engineer

Sep 2011 - Dec 2011

- Improved the software development life cycle by keeping track of the development process using project management software and interfacing with software developers and QA team.
- Designed new test scenarios that improved testing coverage of products.

Electrical Engineering Department, UBC, Vancouver, Canada
Undergraduate Research Assistant

May 2011 - Aug 2011

- Developed C base benchmarks to provide parallel computations for execution on Graphics Processing Units.
- Profiled Apache server performance under stress and modified the encryption source code to run the security module of the server in parallel mode on a Graphics Processing Unit to increase the performance.

SKILLS SUMMARY

Data Analysis: Machine Learning, NLP, Statistical Modeling, Time Series, Regression, PCA, Monte Carlo
Programming: C/C++, MySQL, MATLAB, Python, JavaScript, UNIX/Linux

PROJECTS

Evaluation of biases in analysts' earnings forecasts (Haas School of Business)

Jan 2016 – Present

- Building a robust model to systematically forecast earnings and returns based on company characteristics.
- Investigating the potential biases in analysts' predictions by seeking abnormal profit from a portfolio created based on deviations from normative statistical rules.

Optimization in Operations Research (KPMG)

Sep 2013 – Apr 2014

- Developed a genetic algorithm to approximate solutions to a vehicle routing problem for a network of 140 geolocations.
- Created an analytical tool to identify a set of near optimum distribution locations to minimize the transportation cost.
- Led a team of three engineering students and structured the approach to the problem.

Quantitative Modeling in Operations Research (Sauder School of Business)

Dec 2013 – Mar 2014

- Produced a quantitative model of discharge dynamics to evaluate the emergency department behavior.
- Decreased the patient queuing time by 15% to a target level by moving the supply curve to an optimal time.
- Held meetings with senior consultants from McKinsey to address arising issues and prepare the proposal and report.

OTHER

- Interests: Cycling, reading and following technology trends (Magazines and blogs), business and financial news.

Jean SANTINI

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Date of Birth

09/29/1991

EDUCATION

- **March 2015 – March 2016** UC Berkeley – Master of Financial Engineering (MFE Program)
- **2011 – 2013** ENSAE ParisTech – Master in Economics & Applied Mathematics
 - ◆ Courses in: Econometrics, Advanced Mathematical Statistics, Macroeconomics, Advanced Microeconomics, Microeconomics of Finance, Financial Instruments, Stochastic Calculus, Simulation & Monte Carlo Methods, Risk Management
- **2008 - 2011** Lycée Louis le Grand, Paris (MPSI - MP*)
France's leading preparatory school for entrance to the highly competitive "Grandes Écoles"
- **2005 - 2008** Lycée Paul Gauguin, Tahiti, French Polynesia
French baccalaureate diploma in Sciences, awarded with honors (average: 17.68/20)

SKILLS SUMMARY

- **Programming** in C++, VBA, SQL, Maple, SAS, R, Python
- **Bloomberg** – Reuters
- **French** Fluent (mother tongue)
- **English** Fluent
- **Spanish** 5 yrs. in high school
- **Arabic** Spoken in high school, 2 yrs. at ENSAE
- **Chinese** Spoken language during holiday at Beijing Language & Culture University in 2007

WORK EXPERIENCE

- **Jul. 2014 – Jan. 2015** **Goldman Sachs International – London**
Intern, PIPG Cross-Asset Derivatives Sales team (Corporate & Investor Products Group):
 - ◆ Designed and priced cross-asset structures (Equity/Rates/Credit/FX) for Swiss private banks and institutional clients
 - ◆ Provided tailor-made market solutions addressing market opportunities and operational challenges, under compliance and legal requirements
 - ◆ Worked with Trading to price and evaluate volatility, correlation, cross-currency and skew risks embedded
- **Jan. 2014 – Jul. 2014** **Goldman Sachs International – London**
Intern, ABS Structuring (Corporate & Investor Products Group):
 - ◆ Supported securities and issuance processes in collaboration with trading, sales, technology and operational teams
 - ◆ Managed platform's database using sophisticated programming tools (VBA & SQL infrastructures)
 - ◆ Generated automated reports addressed to senior management
- **Jul 2013 – Jan. 2014** **Crédit Agricole Corporate & Investment Bank (CA-CIB) – Paris**
6-month placement in the Credit & Rates Structuring team:
 - ◆ Designing and pricing cross-asset structures (Equity/Rates/Credit/FX/Inflation) for both linear and non-linear products
 - ◆ Ensured smooth execution of transactions between Trading and Sales
 - ◆ Assessed full economics of transactions with regard to risks embedded: margin policy, CVA, FVA, provisions, adjustments
- **Jun. 2012 – Sep. 2012** **L'Occitane International Financial Management – Geneva**
Intern, Accounting Consolidation Team (corporate finance), under the responsibility of the CFO: reporting, account consolidation and budgetary planning

INTERESTS

- **Volleyball** 2 yrs. in « ASPTT Paris » club (league: departmental 1) & 2 yrs. in ENSAE's volleyball team (captain)
 - ◆ **2012: Ile de France champion** (league: university 2)
- **Martial Arts** Aikido (8 yrs. – brown belt) & Karaté (3 yrs. – blue belt)
- **Snowboard** 15 yrs. in Mount Hood, USA
- **Swimming** 10 yrs. in the "Club des Nageurs de Polynésie"
- **Drums** 7 yrs. at the Conservatory of French Polynesia

Rohit Sarma

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EDUCATION

University of California, Berkeley - Haas School of Business

2015 – 2016

Master of Financial Engineering Candidate

- Coursework spans across ▶ Asset Classes: Equities, Currencies, Rates, Credit ▶ Empirical Analysis & Quantitative Techniques for Valuation ▶ Dynamic Asset Management, Optimization & Risk Management ▶ Behavioral Finance

Indian Institute of Technology Madras

2006 – 2010

Bachelor of Technology, Mechanical Engineering

- Published research paper in international journal *Measurement, Elsevier* on estimating temperature using sound waves. Created algorithm capable of estimating temperature within 5% error.
- Awarded *Merit Scholarship for Professional Studies* by Govt. of India for all 4 years.

SKILLS & CERTIFICATIONS

- **Finance:** Passed CFA Level 2 exam

- **Programming / Tools:** MATLAB, VBA, Bloomberg

PROFESSIONAL EXPERIENCE

AXA Investment Managers, Rosenberg Equities

San Francisco Bay Area, Winter, 2015 – 2016

Internship, Portfolio Management – Quantitative Equity

- Studied the effectiveness of harvesting alpha using proprietary factors by partitioning investment universe. Proposed a new alpha recipe for fast growing European companies.
- Assisted the team in managing US-based funds. Participated in investment strategy reviews, trade recommendation discussions and portfolio rebalancing sessions. Reported to O Americas.
- Developed framework for performance & attribution of global strategies (Small cap, Emerging, Intl. broad).

MSCI Inc. (formerly MSCI Barra)

Mumbai, (2013 – 2015)

Associate, Multi-Asset Class Portfolio & Risk (*Buy/Sell*, *Multi-Asset Solutions, Continental Europe & India*)

- Identified market opportunities to drive team growth. Conducted sales campaigns targeting Swiss hedge funds.
- Modeled multi-asset portfolios using proprietary valuation tools (*RiskMetrics & Barra*). Ensured clients' investment strategies are accurately reflected.
- Explained sources of alpha, risk using multi-factor models (fundamental/market based). Created VaR reports, stress tested portfolios. Presented results to prospects/clients (Portfolio Managers, CROs, ETF desks).
- Created *Liquidity Overview* reports for European macro hedge fund analyzing the cost of trading illiquid assets.

Analyst, Global Equities Indexes, (Hedge Funds, UK Belgium Netherlands)

Mumbai, (2012)

- Supported total sales of \$2m: Educated clients & prospects on MSCI index methodology.
- Advised clients on currency indices (currency hedged, allocation capped) for benchmarking investment strategy.
- Visited fund houses to pitch index solutions: smart beta strategies, economic exposure themes.

JPMorgan Chase & Co.

Mumbai, (2010 – 2012)

Business Analyst & Developer, Investment Banking Technology

- Recruited under the *Corporate Development Program* – a firm wide fast-track leadership program for graduates.
- Designed & developed derivatives processing platforms to consolidate legacy systems. Achieved cost savings of more than \$250,000 by removing redundancies across clearing & settlement systems.
- Reduced manual intervention by conceptualizing and implementing an application to handle faulty F&O trades.

GE Global Research

Bangalore, (Summer, 2009)

Summer Internship, John F. Welch Technology Center

- Developed a novel procedure to model surface wear on a plastic. Solved PDEs numerically in MATLAB.
- Predicted time of failure using simulations. Created visualizations from scratch to graphically track wear evolution.
- Reduced dependence on experiments from 8 weeks to 8 hours. Resulted in GE's commercial application.

ACHIEVEMENTS

- Secured All India rank 63 & State rank 12 in *All India Engineering Entrance Exam* attended by over 500,000 students.
- Developed a self-powered Tree climber, a low cost solution for rural areas with shortage of skilled labor. *Principal Scientific Advisor to the Govt. of India* supported the project.
- Worked as copywriter & graphic designer for IIT's annual student festivals. Created brochures to attract sponsorship.

MINA SHANKAR

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Location of Preference: New York, London

EDUCATION

University of California, Berkeley • Berkeley, CA

March 2015–March 2016 (Expected)

Master of Financial Engineering Candidate: GPA 3.8/4.0

- ◆ Awarded \$10,000 scholarship by Financial Women of San Francisco
- ◆ Team Projects: Decomposing the sovereign bond risk premium; Modeling the term structure of interest rates

Northwestern University • Evanston, IL

September 2008–August 2011

Bachelor of Arts, Economic & Statistics: GPA 3.5/4.0

CERTIFICATIONS

Passed all three levels of the CFA Program on first attempt (awaiting CFA designation)

Investment Management Certificate, CFA Society of the UK

Math Foundations, Statistics, and C++ Programming for Financial Engineers Certificates, University of California, Berkeley

Passed P & FM exams, Society of Actuaries

Bloomberg Aptitude Test: 700 (99th percentile; Top 3 performer worldwide – April 2015)

SKILLS SUMMARY

Leadership/Communication: President of Financial Engineering Student Association

Technical: Knowledge of C++, Python, Matlab, R, Stata, Microsoft Word, VBA, POINT, Bloomberg, and Microsoft Office

Languages: Beginner in Mandarin, intermediate in Spanish

WORK EXPERIENCE

Barclays • New York, NY

October 2015–January 2016 (Expected)

Macro Structuring Analyst: Contracted analyst focusing on client solutions across FX, commodities, and rates. Team partners closely with both sales and trading to deliver tailored solutions to clients across asset classes.

Schroder Investment Management • New York, NY

April 2012–January 2015

Fixed Income Analyst: Product specialist for global range of fixed income strategies, responsible for client reports, thought pieces, RfPs, and investment reviews. Split time between Product and Risk/Performance teams, assisted with attribution and portfolio monitoring. Participated in London-based training program, taking full advantage of classroom instruction, real client case studies, interactive simulations, and coaching from senior executives across all asset classes.

- ◆ Developed and implemented quantitative tools to compare relative value across securities and markets. Provided new issuer analysis and industry reviews while educating new users.
- ◆ Named team representative in charge of overseeing the integration of an acquisition's 200+ bespoke reports. Modernized the legacy reporting process for consistency and efficiency across seven teams.
- ◆ Constructed model portfolios for new clients, optimizing for yield under quality and maturity restrictions. Pitched completed portfolios to sales manager, justifying issuer picks and rates outlook.
- ◆ Implemented VBA to automate operations for the team.
- ◆ Processed and evaluated overnight performance for 90+ accounts on daily basis. Calculated attribution to deconstruct performance outside its risk/return objectives; collaborated with Accounting to rectify errors.
- ◆ Developed analytic tool to track 90+ accounts' daily moving average, flagging accounts trading outside its limits.

Morgan Stanley • Chicago, IL

August 2011–April 2012

Equity Analyst: Gained hands-on experience on the investment desk for a 5-person, \$3 billion, quantitative money manager. Worked closely with each team member to provide extensive research, trading, and client support.

- ◆ Implemented R programming to enhance portfolio optimization screens.
- ◆ Monitored risk levels for 60+ index funds across multiple factor and regional styles, using MSCI Barra.
- ◆ Generated creative research ideas inspired by market sentiment; presented findings to Portfolio Manager.
- ◆ Analyzed financial news of companies owned; researched fundamentals to supplement buy/sell decisions.
- ◆ Initiated content upgrade of marketing materials; trained financial advisors in key points to convey to prospects.

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EDUCATION

University of California, Berkeley - Haas School of Business	3/15 to 3/16
Master of Financial Engineering Candidate	
Shanghai University of Finance and Economics - School of Finance	9/06 to 7/10
Bachelor of Economics	
University of Southampton, UK - School of Economics and Finance	9/08 to 7/09
Diploma of Economics	

Passed CFA Level 2, June, 2012

SKILLS SUMMARY

- **Finance** – over four years of trading experience at stock index futures and hedge fund.
- **Software Development** – C++, Python, R, Matlab.
- **Leadership/Communication Skills** – over two years of service as a finance for high net-worth clients.
- **Language Skill** – Fluent in English, Mandarin.

EXPERIENCE

Solon Investment, Shanghai, China	10/15 to 1/16
Quantitative Analyst Intern	
Solon Investment, Shanghai, China	4/10 to 3/15
Trader	
• Developed trading strategies for HSSE stock index futures and made a significant profit.	
• Managed and maintained program trading, measured the earning capacities of strategies and made suggestions for improvement.	
• Gathered relevant information on market prices from domestic and overseas markets, and provided information during the daily trading meeting.	
• Investigated various kinds of trading ideas and price indicators, conducted back-testing of different strategies for both stock index futures and commodity futures.	
Fundnex Investment, Shanghai, China	12/09 to 4/10
Trader Trainee	
• Traded in foreign exchanges and precious metal markets;	
• Conducted technical and fundamental analyses of currency markets;	
Aegon-Industrial Fund Management, Shanghai, China	9/09 to 12/09
Research Intern	
• Performed research on structured products, focusing on product characters, market shares and volumes on developed markets to testify the feasibility of issuing the same products in China;	
• Processed data from Information Database and investigated in different industries;	

INTERESTS

- swimming, running, sailing and squash.
- psychology and behavioral finance.

SHIVAM SINHA, FRM

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EDUCATION

University of California, Berkeley- Haas School of Business Master of Financial Engineering Candidate	3/15 to 3/16
Indian Institute of Technology-BHU (IIT) Bachelor of Technology in Mining Engineering Publications: Four research publications on neural network programming in acclaimed journals FRM (Charter holder), CFA Level 1	7/02 to 5/06

SKILLS SUMMARY

- Finance** – Experience in Investment management, in multi-asset class and in Quantitative analysis.
- Programming**–VBA, R, Python, SQL, Matlab, C++, Bloomberg, Barclays POINT and Yield Book, MorganMarket

INDUSTRY PROJECTS (while in the MFE)

Mellon Capital Management, San Francisco	06/15 to 09/15
• Determination of optimal FX hedge ratio for international equity portfolios, the new methodology provided better returns than 100% hedged and un-hedged portfolios for 5, 10 and 15 years period.	
Dymon Asia – Macro Hedge fund, Singapore	12/14 to 2/15

• Developed a model to determine one-month Indicative volatility for currency options using volatility surface.

• Analyzed DTCC data to find “Magnet” strikes for currencies in high and low volatility environments.

EXPERIENCE

Pacific Private Fund Advisors, New York - Quantitative Analyst Intern	10/15 to 1/16
• Review academic & market literature and test different trading strategies	
• Develop portfolio optimization techniques and back-test and simulation analytics	
Olam International, Singapore - Associate, Commodity Trading	2/13 to 3/15
• Monitored daily market movements and major economic events to estimate probable impact on portfolios	
• Used hedging strategies such as non-custodial call/put spreads to mitigate price and currency risks	
• Developed VaR & pricing models & performed statistical analysis to determine trends in different markets	
Goldman Sachs (GSAM), India- Associate, Asset Management	11/10 to 8/12
• Created Fixed Income and Equity model portfolios and advised portfolio managers about appropriate benchmarks to calculate asset allocation of investment mandates	
• Performed Mean Variance analysis to calculate optimal portfolio weights, analyzed Portfolio attribution reports & rebalanced Fixed Income and Equity portfolios to provide FX and duration hedges	
• Calculated portfolio risk and P&L in “What-if” situations – such as weakening/strengthening of spreads (CDS/Z Spreads) and non-parallel shifts in yield curves	
• Developed asset allocation methodology of S&P GIVI Index; Sharpe ratio of new index increased from -0.10 to 0.29 by using intrinsic value weighing methodology	
Valueserve, India- Manager, Investment Research	5/08 to 11/10
• Led global team of 10 people to develop and rebalance Fixed Income and Commodity Indices/ETFs	
• Created “Short IBOXX € Sovereigns Eurozone TR” ETF and “DB Australia SSA Bonds TR” Index	
• Developed CDS valuation models and volatility index for CDS indices	
IBM, India - Application Developer	11/06 to 05/08
• Developed calculators using C++ to calculate bond analytics such as Yields and Durations	

ADDITIONAL INFORMATION

- Interests: Squash (represented IIT in National Inter-University Squash tournament, 2006), Volunteering (Team Captain for Community Team Work at Goldman Sachs, 2011-2012)
- Scholarships: Sponsorship from Swiss Nuclear Safety (HSK) to do a research project at ETH-Zurich, 2006

William Summer

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EDUCATION

University of California, Berkeley – Haas School of Business	Berkeley, US
Master of Financial Engineering Candidate	Exp. March 2016
▪ GPA: 3.5/4.0	
▪ GRE: Quantitative 169/170 (97 th percentile), Verbal 165/170 (95 th percentile)	
Certificate in Quantitative Finance	London, UK
Final Average: 89%	January 2013
▪ Final Projects: “Pricing Binary Options under Uncertain Volatility by Explicit Finite Difference Methods	
Cardiff University	Cardiff, UK
MSc Financial Economics – Graduated with Distinction	February 2011
London School of Economics	London, UK
BSc Business Mathematics & Statistics – Second Class Honours Degree	July 2009

WORK EXPERIENCE

Deutsche Bank AG, Global Macro (FX and Rates) Structuring – Intern	Frankfurt, Germany
	October 2015 – January 2016
Commerzbank AG, FX Quantitative Solutions Group – Intern	London, UK
	August 2014 – February 2015
▪ Back tested option and forward hedges for multiple EM and G10 currency pairs to devise optimal hedging strategies for corporate clients	
▪ Published research note on profit taking on FX options	
▪ Redesigned the index level verification and roll management system for G10 Carry, Smart DCD and STIRS indexes in VBA	
▪ Created ad hoc tools for FX Sales	
Moody's Investors Service	London, UK
Associate Analyst – Structured Finance – Covered Bonds Team	September 2011 – August 2014
▪ Conducted quantitative and qualitative performance evaluation for mortgage, commercial and public sector covered bond programs	
▪ Increased efficiency for several tasks by Reengineering multiple processes in VBA	
▪ Liaised with issuers and investors clarifying any queries they had regarding the credit analysis	
▪ Published and improved the quarterly “Covered Bonds Monitoring Overview” – a highly regarded document by covered bond investors	
▪ Actively monitored more than EUR 100bn worth of outstanding bonds, with a focus on German, Austrian and Norwegian markets	

Mazars	Munich, Germany
Internship in Audit, Transaction Services and Corporate Finance Advisory	January 2011 – July 2011
▪ Analyzed business strategy, identifying issues and suggesting solutions as part of a team effort to establish a long term strategic solution	
▪ Aided in the creation of restructuring strategy for a recently acquired logistics company	

SKILLS, ACTIVITIES & INTERESTS

Languages: Bilingual; English and German
Technical Skills: VBA, Matlab and Python
Interests: Snowboarding, Running and Football

PETER TSELIOS, CFA

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Berkeley, CA 94705

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EDUCATION	University of California, Berkeley – Haas School of Business Master of Financial Engineering Candidate	Berkeley, CA
3/15 – 3/16		
Citigroup - Team Project	Bond Liquidity and Credit Cycle Dependence – estimate the bid/ask spread value due to liquidity and how the spread changes over the credit cycle	
May 2009	Rutgers University B.A. in Economics, B.A. in Statistics, Minor in Psychology Major GPA: 3.67	New Brunswick, NJ
SKILLS	C++, Matlab, Python, Bloomberg	
EXPERIENCE	OAK GROUP Oil Trading – Internship	London, England
10/15 – 01/16		
09/12 – 02/15	SILVER POINT CAPITAL Trading Assistant <ul style="list-style-type: none">▪ Priced \$3 billion of a global portfolio of products consisting of equities, equity derivatives, bonds, loans, FX forwards and derivatives, swaptions, and CDS on a daily and on a monthly basis▪ Managed daily trade capture and allocation process ensuring liquidity maximization and credit risk minimization▪ Created a hedge equalization model to properly calculate adjusted exposure inclusive of custom basket trades that produced precise target hedge trade allocations for the flagship fund▪ Developed logic to optimize the allocations of trades between the membership funds to equalize exposure as a percentage of relative NAV▪ Negotiated the terms of total return swaps in a short timeframe and subject to significant constraints to allow the firm to gain desired exposure to various credits	Greenwich, CT
04/11 – 09/12	BARCLAYS CAPITAL Prime Services Derivatives Middle Office <ul style="list-style-type: none">▪ Priced unwinds and novations using various models to determine P&L impact▪ Developed a model to calculate daily P&L for the Rates Prime Brokerage desk▪ Designed and implemented a process to identify and track all trades not cleared to LCH to minimize counterparty risk▪ Managed daily trade capture process including booking of new trades, novations, and unwinds▪ Assured responsibility for the execution and expiration of daily option expiries▪ Accountable for identifying and managing risk and P&L to confirm all books are flat	New York, NY
06/10 – 04/11	Network Management <ul style="list-style-type: none">▪ Created a model to identify fee-related pricing inefficiencies that saved the firm over \$500,000▪ Reconciled the entire population of BCI agent bank accounts for various year-end audits to mitigate reporting risk, financial risk, and reputational risk to the firm▪ Key driver and active participant in the global equities build-out for BCI in various markets including Chile, Peru, Colombia, Egypt, Morocco, and Russia	New York, NY
08/09 – 06/10	Interest Rate Derivatives Middle Office <ul style="list-style-type: none">▪ Streamlined daily option expiry process as well as Bermudan trade capture process▪ Planned and organized identification of all trades affected by the Queen's Jubilee holiday, raising trades needing amendment to the appropriate desks▪ Liaised with TAs to create a daily preliminary check to identify all trades with missed resets prior to the snap▪ Played an integral role in rebooking entire population of both year-on-year inflation swaps, and asset swaps▪ Participated in TriOptima – quarterly netting of interest rate swaps with various counterparties to reduce balance sheet assets and liabilities by ~\$11bn USD, and to reduce counterparty exposure by over \$50bn USD	New York, NY
Summer 2008	Prime Brokerage Intern <ul style="list-style-type: none">▪ Developed a new and efficient system for processing, tracking, and retaining Form 1 to Schedule A agreements▪ Collaborated with multiple groups in an effort to identify and resolve various breaks in a timely manner▪ Performed daily activities including: reconciliation of wash accounts, processing cash wires, assessing monthly interest charges for numerous clients, and posting adjustments to client accounts	Whippany, NJ

Maria Vigil

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EDUCATION

University of California, Berkeley-Haas School of Business

Mar 2015-Mar 2016

Master of Financial Engineering Candidate

Current Independent Industry Team Project with Uber

- Development of a business plan to determine the best strategy for the company to expand their business to the food delivery sector, and/or other courier service
- Development of a pricing model that determines at each point in time and city the optimal price for the company to maximize their profits

Instituto Tecnologico Autonomo de Mexico (ITAM)

Aug 2008-Dec 2012

Bachelor's Degree in Industrial Engineering

Award to the best GPA of the Academic Division of Engineering

Loyola University Chicago

Summer 2012

Business Administration Coursework (Investments)

Certificates

"Advisor in Investment Strategies" by the Mexican Stockbrokers' Association

Feb 2013

SKILLS

Programming: Python, Matlab, C++, R, Bloomberg, Visual Basic, VBA, VBA-MACRO, Simio, SAS

Languages: Spanish (native), English (advanced), Italian (intermediate)

EXPERIENCE

Moody's Analytics

San Francisco, CA.

Quantitative Financial Assurance Intern

Oct 2015-Jan 2016

Franklin Templeton Investments (formerly Hacienda Asociados)

Mexico City

Investments Principal

Oct 2012-Mar 2015

- Conducted research and monitored political and financial environment from national and international perspective.
- Managed accounts, including pension funds, endowment and patrimonial funds, cultural and pro bono accounts.
- Provided communications and decision-making support for client portfolio to Portfolio Managers and Head of Investments Committees at the Investments Committee.
- Executed quantitative valuation of fixed income instruments with specific focus on global government debt.
- Provided consistent information updates for internal material and client meetings.

ITAM

Mexico City

Program Director Assistant, Academic Division of Industrial Engineering

Aug 2011-Jun 2012

- Organized and coordinated the graduating process for Industrial Engineering students.
- Monitored teachers in their evaluation of graduating projects.
- Corrected and edited all documents related to graduating process for engineering students.

INTERESTS

Volunteering Activities

- Taught and regularized underprivileged children in their Mathematics and Physics courses.
- Supported a group of women and children who had suffered domestic violence by organizing different activities, such as cooking, crafting, and reading lessons.

Fine arts and photography

Enze Wang
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EDUCATION

University of California, Berkeley - Haas School of Business	3/15 to 3/16
Master of Financial Engineering Candidate	
Project - With Mellon Capital and a team of 4 classmates: Exploration on Du&Schreger's <i>Local Currency Sovereign Risk</i>	
Project - In collaboration with Citigroup and a team of 5 classmates: Emerging Market Sovereign and Corporate Betas	
Tsinghua University, Beijing	9/10 to 7/14
Bachelor of Science in Automatic Control and Engineering	
Bachelor of Arts in Economics (Second Degree)	
Courses Completed – C Programming, C++ Design and Training, Introduction to Complex Analysis, Data Structure, Signals and System Analysis, Numerical Analysis and Algorithms, Operations Research, Computer Organization	

SKILLS SUMMARY

- **Finance** - Three financial internships covering private equity, private placement notes in China and Macro Exotics in the US.
- **Software Development** – Proficient in C/C++, C#, MATLAB; comfortable with Java, C, Assembly, Python.
- **Languages** – Fluent in English and Mandarin.

PROFESSIONAL EXPERIENCE

Barclays Capital Intern in Macro Exotics Team, New York City	10/15-1/16
Bank of China Investment Limited Intern in Private Equity Dept., Beijing	8/13
• Investigated the new energy vehicles area with a data-driven approach and analyzed data. • Created a new energy vehicles field research report and provided investment suggestions. • Collected data for an unlisted company in the new energy vehicles area and wrote a detail-oriented report.	
China Construction Bank Intern in Investment Banking, Beijing	7/13
• Designed a program in C/C++ for information processing of private placement notes in China. • Reviewed the financial statements of the private placement note issuers and clarified the risks of the bonds. • Analyzed the non-public issuance of debt financing instruments directional distribution agreements and bond underwriting agreements for companies in the National Association of Financial Market Institutional Investors.	

RESEARCH EXPERIENCE

Institute of Measurement and Electronic Technology, Tsinghua University, Beijing	4/12 to 3/13
• Designed a muscle measuring system for hospital patients. • Developed a program of displaying data in real time and storing them in files using C and C#.	
Siemens Corporate Technology, Beijing	3/14 to 6/14
• Designed and built the prototype of an expandable Cartesian coordinate robot. • Using PLC programming language to design the hardware system. • Designed the user interface based on the C# to send command and show the moving of the system.	

AWARDS, ACTIVITIES & INTERESTS

- Math: 1st prize in the National Olympiad in Mathematics in China (early admission to Tsinghua University).
- BAT (Bloomberg Aptitude Test): 93 percentile worldwide.
- Captain of the class soccer team during undergraduates.
- Marathon: participant in the Beijing International Marathon for 21-km stage in October 2011.
- Playing soccer, reading, traveling, and fencing.

XIA (Jack) WU

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EDUCATION

University of California, Berkeley – Haas School of Business

Berkeley, CA

Master of Financial Engineering Candidate

March 2016

- Citi Project: Systematically investigated the dynamic hedging strategies on EM corporate bonds using CDX
- Master Paper: Sentiment Analysis in Commodity Market (team of 4)
 - Applied statistical learning techniques on forecasting the monthly gold and oil future price movement using market sentiment scores under supervision of Professor Terrance Odean.

University of Waterloo and Wilfrid Laurier University

Waterloo, ON

Bachelor of Mathematics/Honors Mathematical Finance, Joint Honors Statistics

October 2013

And Bachelor of Business Administration/Honors Finance Option

Graduated with Distinction

- Research Assistant: Conducted research on pricing oil futures using Dynamic Programming and worked with Professor Adam Kolkiewicz
- Academic Project: Studied the advantage of nonparametric interest rate models over CIR Model
- Software Development: Developed tile-matching puzzle video game “Candy Cane” in team of 3
- Courses: Algorithm Design and Data Abstraction, Objective Oriented Programming, Computational Finance

SKILLS AND QUALIFICATIONS

- **Software Development** – Proficient in C++, MATLAB, Java, Python, and Excel VBA, R, Python, and UNIX
- **Finance/Mathematics** - Strong knowledge of derivative pricing, mathematical analysis, and statistics
- **Languages** – Fluent in English & Mandarin

EXPERIENCE

Standard and Poor's – Structured Finance Quantitative Analytics Group

New York, NY

Quantitative Research Associate

October 2015-January 2016

- Developed econometric models such as time series model and Vector Error Regression model for predicting regional house price movement using MATLAB
- Conducted empirical research on residential mortgages, housing markets and consumer credits to support RMBS criteria development
- Assisted with the development and maintenance of quantitative models include loan-level model for estimating residential mortgage default, delinquency, prepayment and loss severity.
- Used Excel, R and SPSS to evaluate metropolitan Statistical Area economic data.

Jana Laboratory Inc.

Aurora, ON

Statistics Research Consultant

April - September, 2012

- Created failure models for pipelines based on Weibull distribution and used statistical analysis to determine the efficiency and reliability of the models.
- Forecasted the pipeline failure rates and developed commercial software based on forecasting results.

OMERS Strategic Investment

Toronto, ON

Business Intelligence

January - April, 2011

- Developed a VBA tool to automate database discrepancy checking process.

- Analyzed OMERS financial performance and prepared year-end financial report.

PUBLICATIONS

- 2015 Wheeler, Polizzi, Wang, Manzi, Schopflocher & Wu. "Economic Factors Affecting Housing Prices: Appreciation Likely to Continue in 2016 for Most MSAs". Standard & Poor's Ratings Services

ADDITIONAL INFORMATION

- Developed an online education platform which introduced online interaction environment to classrooms
- Enjoy reading, swimming, and playing the piano

Kai Xiong

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EDUCATION

University of California, Berkeley - Haas School of Business

3/15 to 3/16

Master of Financial Engineering Candidate

Industrial Team project:

BlackRock (team of 5 MFE students): Predicting and Decomposing the Term Structure of Interest Rates

Citigroup (team of 5 MFE students): Hedge US Corporate Bond Credit Risk Premium with CDX

McGill University - School of Computer Science

1/13 to 5/14

Master of Computer Science, CGPA: 3.85

Politecnico di Torino

9/09 to 6/13

Bachelor of Electronic and Computer Engineering, CGPA: 3.80

SKILLS SUMMARY

- **Finance** – CFA I candidate, pricing platform development, Berkeley Trading competition in place.
- **Computer Science** – Machine Learning, C++, Java, Scala, Python, R, Matlab, Kubernetes, Shell, UNIX
- **Languages** – Fluent in English, Mandarin; Elementary in Italian, French

INDUSTRY EXPERIENCE

Mariner Investment Group, LLC, New York, NY

10/15 to 1/16

Hedge Fund Quantitative Analyst Intern, Mariner Capital

- Assisting portfolio managers in daily trading activities (Matlab, Python)

Morgan Stanley, Montreal, QC

12/14 to 3/15

Technology Associate, Institutional & Corporate Technology, Group

- Developed and maintained Interest Rate Swap rate pricing platform. (C++, Java)

Morgan Stanley, New York, NY

6/14 to 11/14

Technology Analyst, Enterprise Data & Services Group

- Developed a bond recommendation engine (Scala, DB2) for wealth management division.
- Managed cross-departmental trading data and researched emerging technologies (Spring, Java).
- Fifteen week training program, which provided comprehensive training of finance and core programming techniques (C++, Java, Scala, Python, OOD, Concurrent programming, Template programming, Functional programming, Virtual Technologies, Database, etc.).

McGill University, Montreal, QC

1/13 to 5/14

Research Assistant

- Applied Markov chain to build a stochastic model of dedicated short-range communication (DSRC) protocol for VANETs. Implemented DSRC multi-channel platform in NS2 simulator using C++.
- Courses TAed: Software Engineering (Design Patterns), Software Systems (C, python, HTML), Software Architecture. Instructed a non-trivial Java project.

Bell laboratories, Paris, France

6/12 to 12/12

Research Trainee

- Studied cutting-edge OpenFlow switch technology. Report possible improvement of current router products to the production team. Actively involved in proposing and implementing a novel inter-controller routing protocol for Software Defined Networks (SDN).
- Delivered a Bell Labs-wide technical presentation about SDN.

INTERESTS

- Guitar, traveling, photography, playing tennis and badminton

LUPING YANG

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EDUCATION

University of California, Berkeley - Haas School of Business	3/15 to 3/16
Master of Financial Engineering Candidate	GPA 3.8/4.0
University of Florida	8/09 to 12/14
Doctor of Philosophy in Civil Engineering	GPA 3.85/4.0
University of Florida	8/11 to 5/14
Master of Science in Applied Mathematics	GPA 3.85/4.0
Tongji University	9/05 to 7/09
Bachelor of Engineering in Engineering Mechanics	GPA 4.3/5.0
Passed CFA Level 3	9/11 to 8/14

SKILLS SUMMARY

- **Technical Skills** – C++, Matlab, R, Python, Bloomberg, Mathematica
 - **Leadership/Communication Skills** – Investigator on a National Science Foundation project.
 - **Languages** – Fluent in English and Mandarin.

EXPERIENCE

Research Intern, AXA Rosenberg, Orange, CA	10/15 to 1/16
Global Portfolio Project by AXA Rosenberg's Quantitative Team	
<ul style="list-style-type: none">• Predicting alpha using AXA Rosenberg's fundamental analysis• Assisting Director of Research to construct a portfolio using systematic approach• Conducting optimization under various conditions	
Hurricane Research Group, University of Florida, Gainesville, FL	2/10 to 12/14
Florida Public Hurricane Loss Model Project by Florida Department of Financial Service	
<ul style="list-style-type: none">• Investigated the adequacy of wind loads specified by North American Building Provisions by analyzing 130GB of experimental data• Designed probability density functions (PDFs) to model non-Gaussian data. The program of Maximum Entropy PDF model was bought by J.P. Morgan & Co. to model non-Gaussian financial data• Developed a Non-Negative Polynomial PDF model to represent PDFs of strongly non-Gaussian data and extended its application using Maximum Likelihood method and numerical optimization	

PROGRAM PROJECTS

Citi Fixed Income Research, University of California Berkeley, Berkeley, CA **04/15 to 10/15**
Stochastic Spread and Default Transitions Team Project

- Adjusted historical credit transition matrix to the current credit cycle using rating upgrade-downgrade ratio
- Optimized credit transition matrix to match market credit spreads
- Applied stochastic spread values on transition matrix to predict credit spreads and spreads VaR

INTERESTS

- Photography, playing bowling and basketball

ZHENG ZHAI, Ph.D.

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510.529.6377, zheng_zhai@mfe.berkeley.edu

EDUCATION

University of California, Berkeley - Haas School of Business	3/15 to 3/16
Master of Financial Engineering Candidate	
<ul style="list-style-type: none">Graduate Student Instructor for the "Statistics for Financial Engineering" MFE pre-program courseIndependent Industry Projects:<ul style="list-style-type: none">BlackRock, Inc. Using Machine Learning Techniques to Forecast Corporate Events. (Team of five, Captain)Citigroup, Inc. Hedging the Emerging Market Bond with CDX. (Team of five)Convergence Investment Management, LLC. Statistical Arbitrage of Closed-End Funds/ETFs. (Team of three)	
University of California, Berkeley	8/09 to 12/14
Doctor of Philosophy in Chemical Engineering. Advisor: Prof. Alexis T. Bell.	
Tsinghua University	9/07 to 7/09
Master of Science in Chemical Engineering (Rank 1/79, Excellent Master's Thesis Award) Bachelor of Science in Chemistry (Rank 1/58, Excellent Bachelor's Thesis Award)	9/03 to 7/07
Peking University	9/06 to 6/09
Bachelor of Science in Economics with focus on Finance (21st Century Financial News Scholarship)	

INDUSTRY EXPERIENCE:

Barclays PLC, New York	10/15 to 1/16
Quant Analytics Intern, Credit Risk Modeling	

SKILLS SUMMARY

- Statistics:** Three Ph.D. level core courses (Advanced Probability, Advanced Statistics, Linear Models) taken in the statistics department at UC Berkeley. Accomplished "Machine Learning" course on Coursera.
- Programming:** Proficiency in C++, Python, R, Matlab, LaTeX, UNIX, and SQL. Accomplished "Algorithms: Design and Analysis" course on Coursera.
- Research:** Published two articles in top-tier journals and presented at international conferences.
- Leadership:** Committee member of Tsinghua Student Union. Led research projects and mentored students.

SAMPLE PUBLICATIONS

- Zheng Zhai, et al.** "Band-Gap Energy as a Descriptor of Catalytic Activity for Propene Oxidation over Mixed Metal Oxide Catalysts." Journal of the American Chemical Society (JACS) (top journal in Chemistry), 2014.
- Zheng Zhai, et al.** "The Kinetics of Selective Oxidation of Propene on Bismuth Vanadium Molybdenum Oxide Catalysts." Journal of Catalysis (top journal in catalysis), 2013.

EXPERIENCE

University of California, Berkeley	8/09 to 12/14
Graduate Student Researcher, Bell Lab, Chemical Engineering Department	
<ul style="list-style-type: none">Solved the long-lasting industrial problem of systematically designing highly efficient catalyst through mathematical modeling, data analysis and real-world experiments.	
Graduate Student Instructor for two undergraduate core courses	
Research Assistant in State Key Laboratory of Chemical Engineering, Tsinghua University	10/05 to 7/09
Financial News Analyst, National School of Development, Peking University	9/06 to 12/07

INTERESTS

Vocal music (Best Singer award, Tsinghua University), volleyball, traveling, and fashion/styling

Liyun (Felicity) Zhang

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EDUCATION

University of California, Berkeley – Haas School of Business

Master of Financial Engineering Candidate

Berkeley, CA

Team Project for Citigroup:

Big Data Modeling of ROE Changes for S&P 500 Companies.

04/2015-09/2015

- Extracted features from cleaned-up SEC filings with Term Frequency-Inverse Document Frequency weighted Bag-of-words algorithm and modified word2vec algorithm. Predicted direction of change in ROE using extracted features and Gradient-Boosting-Machine-based classifier. Accessed model performance against benchmark model which contains existing signals as predictor variables.

University of Hong Kong

Bachelor of Science in Quantitative Finance (Dean's Honors List)

Hong Kong

Cumulative GPA: 3.6 Major GPA: 3.7

09/2012-06/2014

Harvard University – Harvard Summer School

Course Taken: Linear algebra and differential equations, Scientific computing

Boston, MA

Letter Grade: A

/2012-08/2012

Zhejiang University

Credits Earned: 135.5 units towards the Honorary Bachelor Degree of Economics and Finance

Hangzhou, China

Cumulative GPA: 3.95 Major GPA: 4.0

09/2010-06/2012

SKILLS SUMMARY

- Finance:** Derivatives pricing, fixed income securities, interest rate modeling, credit risk modeling, mortgage backed securities, and quantitative risk management.
- Programming:** C++ (OOP), Python, MATLAB, SQL, and R.
- Mathematics:** Stochastic calculus, empirical methods, and optimization methods for finance.
- Languages:** English (Fluent), Mandarin (Native), and Japanese (Conversant).

PROFESSIONAL EXPERIENCE

Morgan Stanley

Fall Intern (Desk Strategist) – Municipal Bond Trading Team

New York

10/2015-12/2015

HSBC Global Banking and Markets

Co-op Student Trainee – Quality Team

Hong Kong

06/2014-12/2014

- Retrieved data samples from trade reporting systems and automated data field mapping with SQL.
- Performed quality control reviews on trade reporting data samples of OTC derivatives to assess IT quality for production acceptance and regulatory compliance conformance.

Frontier Research & Technology Ltd

Research Intern

Hong Kong

02/2014-05/2014

- Generated and analyzed daily implied volatility surface of Hang Seng index options with MATLAB.
- Developed index options trading algorithms using C++ for an electronic trading platform.
- Monitored index arbitrage opportunities in real-time with Bloomberg Excel Add-In data streams.

CCB International Asset Management Ltd

Summer Intern

Hong Kong

06/2013-08/2013

- Led the first quantitative research project for one of the private equity funds of the company (HKD 2M under management), and focused on the development of dynamic pricing models for embedded options.
- Built Excel interfaces with XLL to price option embedded bonds with models implemented in C++.
- Simulated intraday yield curve evolutions with MATLAB to estimate the VaR of fixed income investments and dynamically rebalance the portfolio allocation across multiple assets.

INTERESTS

Cooking, amateur piano player, swimming, rock-climbing and self-drive tour.

Nancy Qiannan Zhang
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HOLDS GREEN CARD

EDUCATION	UNIVERSITY OF CALIFORNIA BERKELEY Master in Financial Engineering Overall GPA: 3.807/4.0	March 2016
	PASSED CFA LEVEL I EXAM	June 2014
	CARNEGIE MELLON UNIVERSITY Pittsburgh, PA Bachelor of Science in Electrical and Computer Engineering Minor: Computational Finance Overall GPA: 3.75/4.00	May 2012
TECHNOLOGY SKILLS	Proficient: Java, Linux environment, C++. Intermediate/Developing: R, Matlab, C, C#, Python, UNIX Shell Scripting, SQL, KDB.	
WORK EXPERIENCE	MORGAN STANLEY <i>Fixed Income Division Strats Fall Associate (PG)</i> BARCLAYS <i>Rushmore Rates risk and pricing team</i> Rates Trade Capture Workflow Developer for Generic Trading Ticket <i>September 2013 - Mar 2013</i> <ul style="list-style-type: none">Worked with quantitative analysts and traders to support new products.Developed on the server side to build PWA for trade level and portfolio level trades.Delivered tools for rates and options risk for real-time pricing.Built out business logic for credit trading rules on the strategic multi-asset pricing system. <i>September 2013</i> <ul style="list-style-type: none">Incorporated third party component packages to accommodate business requirement.Designed and implemented dynamically routed trading ticket features to docking view using Prism and WPF. <i>ash - Cities of Derivatives Trading</i> Credit Flow Technology Summer Analyst <i>Jul 2012 - Mar 2013</i> <ul style="list-style-type: none">Developed and deployed high performance order management system.Resigned the system to avoid memory outage.Implemented compliance and regulatory requirements Credit Flow Technology Summer Analyst <i>Summer 2011</i> <ul style="list-style-type: none">Experienced the development cycle on individual projects CARNEGIE MELLON UNIVERSITY Teaching Assistant, ECE department Peer Tutor, Academic Development	<i>September 2013 - March 2015</i> <i>Mar 2013 - September 2013</i> <i>Jul 2012 - Mar 2013</i> <i>Summer 2011</i> <i>Aug 2009 - May 2012</i>
PROJECTS	Citi Sovereign Bond Relative Value Trading <ul style="list-style-type: none">Conducted research intended to outperform indices of investment-grade and emerging market sovereign bond indexes.Identified "rich" vs. "cheap" bonds by doing statistical analysis on ECR scorecard, default probability and bond spread.Explored various weights for relative value within and between sectors for optimal strategies. BlackRock When Big Data Meets Over-The-Counter Trading <ul style="list-style-type: none">Analyzed the price impact on trading volumes of TBA and estimated the capped trade volumes from Trace data.Implemented VPIN metric and applied it to trading algorithms of TBA.	<i>April 2015 - Present</i> <i>April 2015 - Present</i>
HONORS	Deans List, College of Engineering, 2008, 2009	

Zhuoran (Joyie) Zhang

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510-944-9359

EDUCATION

University of California , Berkeley - Haas School of Business	March 2015 - 2016
<i>Master of Financial Engineering Candidate</i>	
Industry Project - Pinnacle Ventures, <i>Investment Scoring Model</i>	May 2015 – Present
• Establish models to determine credit risk, loss given default, and loan valuation	
• Construct a portfolio based on credit analysis and optimization	
University of Waterloo , Ontario, Canada	September 2009 - 2013
<i>Bachelor of Mathematics</i>	
<i>Double Honors in Mathematical Finance and Statistics, Minor in Economics</i>	

SKILLS SUMMARY

- **Finance:** knowledgeable in financial products of various asset classes.
- **Analysis:** optimization under constraints, empirical models and scenario analysis.
- **Programming:** proficiency in MATLAB, R, and Python
- **Leadership/Communication:** Performs effectively in a team environment or independently and enjoys solving real world problems with quantitative and computational skills.
- **Language:** Fluent in English and Mandarin

EXPERIENCE

JP Morgan Chase & Co., CIB Business Architecture and Transfer Pricing Internship	October - December 2015
• Evaluate of existing investments to expand services	
• Create new strategic partnerships	
• Evaluate of business operating and technology models to identify efficiencies	
China Development Bank, Beijing, China	June - August 2014
<i>Finance/Accounting Intern, Full Time Internship</i>	
• Participated in investment project management and provided financial suggestions regarding project planning	
• Managed project funding and developed cost controlling methods	
• Prepared financial report and conducted revenue/expense analysis	
Deloitte Consulting, Shanghai, China	May - August 2012
<i>M&A Financial Advisor/Service Intern, Full Time Internship</i>	
• Researched government policies and regulations related to investors' targets and rationale	
• Conducted market research utilizing various tools and organized information into a report	
• Developed growth strategy projects including new market entry strategy for portfolio companies	
• Conducted phone interviews with key target company stakeholders and government officials	
GABAE Industries, Waterloo, Ontario, Canada	May - August 2011
<i>Market Analyst, Full Time Internship</i>	
• Generated crucial background information for making investment decisions	
• Collected and analyzed detailed information about various companies, including company structure, competitors, products, operation costs, market size, and intellectual properties	

INTERESTS

Reading, Traveling, Swimming, Weight Training, Cardio, Wine and Coffee tasting

ZHENG NAN ZHAO

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384-0823 | zhengnan_zhao@mfe.berkeley.edu

EDUCATION

University of California, Berkeley – Haas School of Business

Master of Financial Engineering candidate

Berkeley, CA

3/15 – 3/16

- Cumulative GPA: 3.5/4.0
- Course projects:
 - Asset-Backed Security Markets: Empirical fitting of mixture baseline hazard for commercial mortgages
 - Equity and Currency Markets: Regression-based long-short trading strategy for G10 currencies

New York University – College of Arts and Science

B.A. in economics, *summa cum laude*

New York, NY

8/10 – 5/14

- Cumulative GPA: 3.925/4.0
- Dean's List for Academic Year 2011 – 2013 French Book Award 2012 – 2013

New York University in London

- Coursework in contemporary British politics and culture

London, UK

1/12 – 5/12

SKILLS SUMMARY

- Passed the CFA Level I Bloomberg BAT: 650 (98%) GRE Quantitative: 162 (98%)
- Programming: Python, Matlab, C++
- Languages: Fluent in English and Mandarin, conversational French and Japanese

INTERNSHIP EXPERIENCE

Barclays, SPG

Associate

New York, NY

10/15 – 1/16

- Responsible for the analytics of agency MBS in the Securitized Products Group

Keller Williams Realty

Investment analyst

New York, NY

5/13 – 7/13

- Facilitated 2 joint ventures to acquire hotels in New York, creating spreadsheets that explained returns on different amounts of equity investments
- Analyzed the financial statements of 4 hotels in New York, and assessed their growth prospects for potential buyers
- Examined the deal structures of 6 commercial projects in New York, Miami and London with total values of more than 3 billion dollars

Bank of China

Office assistant

Hangzhou, China

12/12 – 1/13

- Monitored international transactions made between companies, and conducted daily examinations of firms' eligibility to conduct transactions using a national supervision system
- Sorted and maintained over 300 business record books spanning 2002 – 2008 for easy access

AFFILIATIONS

Phi Beta Kappa Society

Member

New York, NY

4/13 – Present

- Elected to membership in the national honor society for scholastic excellence

Presidential Honors Scholar Program at NYU

Honors scholar

New York, NY

9/11 – 5/14

- Discussed and critiqued research proposals with other students and distinguished faculty members
- Actively participated in community service projects around campus such as Soup Kitchen

NYU Billiards

Co-founder

New York, NY

4/11 – 9/12

- Organized club tournaments and arranged regular gatherings for members to improve
- Coordinated daily operations of the club, and oversaw a personnel of 12 people

PUBLICATION

Mercer Street 2011 – 2012: a collection of essays from the expository writing program

- Essay "In the Name of Understanding and Respect" listed under "Notable Essays of 2011 – 2012"

INTERESTS

- Acoustic guitar, billiards, musical theatre, tennis

Yusu Zheng

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yusu.zheng@mfe.berkeley.edu

Education

University of California, Berkeley

Master of Financial Engineering - Candidate

CGPA - 3.814/4.00

Berkeley, CA

Expected: March 2016

McGill University

Bachelor of Arts - Honors Economics, Finance and Mathematics

CGPA - 3.92/4.00

Montreal, Canada

September 2011-June 2014

CFA Institute

CFA exam level II - Candidate

December 2013-Present

Team Project

Using Machine Learning Techniques to Forecast Corporate Events

In progress

Blacksack, San Francisco

- Extract business and product information from companies' 10K filings through text-mining.
- Classify all US-listed companies into test-based industry peers using LDA algorithm in Python

June 2015 – October 2015

Experience

PricewaterhouseCoopers, Financial Analytics and Derivatives Group

- *Winter Associate*

San Francisco

October 2015 – January 2016

Bank of China International, Asset Management Department

- *Quantitative Analyst*

Shanghai, China

July 2014 – March 2015

- Implemented and back-tested valuation of Market-linked Notes embedded with discretely monitored Asian options through Monte Carlo simulation methods in Matlab.
- Programmed plain vanilla option pricing formulas in C++ and integrated them into internal valuation platforms.

CITIC Securities, Investment Banking Division

- *Summer Analyst*

Shanghai, China

May 2013 – August 2013

- Analyzed margin benefits and cost of client's debt level using market implied capital structures benchmarks.
- Conducted sensitivity analyses to evaluate corporate performance under different operating scenarios and capital structures.
- Researched discrepancies between national and provincial taxation policies on private placement.

Roland Berger Strategy Consultants, Financial Services Group

- *Summer Intern*

Shanghai, China

May 2012 – August 2012

- Programmed data scrubbing module in Perl to collect financial statistics from Chinese investment banks' financial statements to update team databases.
- Researched global practices of industrial and financial capital integration, focusing on leasing activities.

Skills

Programming Languages: C++, Matlab, Python and L^AT_EX

Languages: English and Mandarin Chinese

Awards

Doug Purvis Foundation Prize in Economic Policy (2014)

First Class Joint Honors in Economics and Finance(2014)

First Place in Quantitative Outcry in Rotman International Trading Competition (2014)

Dean's Honor List (2013, 2014)

National Scholarship, China Ministry of Education (2011)

Outstanding Shanghai Expo volunteer, The Bureau of Shanghai Expo Coordination (2010)

XINGJIAN ZOU

2140 Stuart St., Berkeley, CA, 94705 • 217-417-9823 • xingjian_zou@mfe.berkeley.edu

EDUCATION

University of California, Berkeley – Haas School of Business Master of Financial Engineering Candidate	3/2015-3/2016
University of Illinois, Urbana-Champaign Master of Science in Accountancy Bachelor of Science in General Engineering, Business Minor Graduated with honors in 3 years Study abroad in England, Germany and Italy	8/2010-5/2014 GPA: 3.95/4.0 GPA: 3.78/4.0

SKILLS

Financial Analysis: Passed CFA Level 1, Passed all 4 exams towards CPA (US)

Computer Languages and Software: C++, Matlab, Python, SQL, Stata, MS Office

Languages: Fluent in English and Mandarin, conversational in German and It

INTERNSHIP EXPERIENCE

Pricewaterhouse Coopers, San Francisco, CA Financial Analytics and Derivatives Group	10/2015-1/2016
<ul style="list-style-type: none">Independently value complex and derivative products including swaps, options, bonds with optionality and contingent offers to determine the quality of financial reporting of clientsPractice various quantitative methods including Monte-Carlo simulation, Black-Scholes model, interest rate models and credit modelsGain exposure to commodity, fixed income, foreign exchange and equity products	
Pricewaterhouse Coopers, Shanghai, China Assurance Department Financial Services Group	7/2014-9/2014
<ul style="list-style-type: none">Performed audit procedures on financial assets during annual review of Shanghai Pudong Development BankCommunicated with clients effectively on requirements and misstatement explanations	
Consulting Department Financial Service Group	
<ul style="list-style-type: none">Researched the microcredit business prospects in China and compiled a report on the industry leader	

PROJECT EXPERIENCE

University of California, Berkeley, CA Venture Capital Credit Risk Modeling	5/2015-9/2015
<ul style="list-style-type: none">Estimated credit risk of startups through machine learning	
Mortgage Backed Security Project	
<ul style="list-style-type: none">Designed an innovative pool structure with swap-type interest-only and principle-only stripsLowered funding requirement by reducing the down-payment to within 10 bp of collateral size; reduced prepayment risk for interest-only strip with an embedded floorPriced the strips with Hull-White term structure model and reduced-form hazard model	
Foreign Exchange Investment Project	
<ul style="list-style-type: none">Investigated the potential of using trade balance as an currency investment signalBack-tested and simulated return over 15 years by constructing portfolios through utility optimizationIncorporated momentum signal and stop-loss mechanism to smoothen performance	
University of Illinois, Urbana-Champaign, IL Financial Statement Analysis Project	1/2014-5/2014
<ul style="list-style-type: none">Reformulated financial statements by separating operating from financing accounts and reflecting off-balance sheet losses and liabilitiesPerformed leverage analysis using Penman-Nissim framework and priced equities using residual earnings and free cash flow discount models	