





























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JR1796 - Modeling and Analytics Opportunities - all experience levels

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17. Ke Ma	P10464	
18. Mursaleen Shiraj	P33573	
19. JUE WANG	P33303	
20. XIAOLUN LI	P53636	
21. Vivek Ashodha	P54135	
22. Han Zhang	P54128	
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24. Mary Phythian	P39731	
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26. Stephanie Harrington	P20042	
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Ahmed Belhad, Ph.D. (U.S. citizen)

San Antonio, TX 78229

(806) 730-8754. ahmedbelhad@gmail.com

<https://www.linkedin.com/in/ahmed-belhad-phd-88449231/>

Research Interests

Probability, Statistics, Data science, Optimization, Bayesian statistics, Time series, Computational statistics, Saddlepoint Approximation, Copulas, Order statistics, Simulation, Bootstrapping, Asymptotic theory, Extreme value theory, Actuarial science, Finance, Risk management, Risk Measures

Education

Texas Tech University Lubbock, TX

Ph.D. in Statistics. GPA: 3.93/4.00 Aug 2020

Dissertation: "New Estimators for Two Forms of the Financial Systemic Risk Measure Commonly Known as Conditional-Value-at-Risk"

- Advisor: Dr. Alex Trindade
- Hua Yu Memorial Scholarship 2019-2020
- Anderson Math Grade Scholarship 2018-2019

Texas Tech University Lubbock, TX

Master's Degree in Statistics. GPA: 3.89/4.00 Dec 2018

- TPEG Grant GR Non-Res 2016-2020

Metropolitan State University of Denver Denver, CO

B.A. in Mathematics with Magna Cum Laude. GPA 3.95/4.00 Dec 2012

Minor in Education with passing Praxis II test, (top 15%)

- Recognition from Who's Who Among Students in American Universities & Colleges. 2011
- ETS Recognition of Excellence, Mathematics: Content Knowledge- Top 15% - Jan 2011
- Colorado teaching License grades 7 to 12, number 32394 Jan 2012-Jan 2015

University of Sciences II Ain Chock Casablanca, Morocco

B.S. in Computer Science May 2005

Internship

Noble Energy Denver, CO

Research Statistician Dec 2014-Feb 2015

Worked on Preventive Maintenance Forecasting:

- Identified downtime predictability and most highly predictable downtime reasons.
- Gathered metrics on potential value of this information and implemented this predictor.

Scheduled for Rigs Model in a Well Drilling Plan Project with Restrictions:

- Project Duration
- Expected Production Resulting from a Project
- Drilling Rig Availability
- Cropland seasons

Employment

University of the Incarnate Word *Visiting Assistant Professor*

San Antonio, TX
Aug 2020 to Present

Responsible for teaching, scholarship, service and professional activities. Maintaining the highest standard of professional ethics. Teaching a workload of 5 courses per semester (15 credits hours).

Courses taught:

- MATH 0320: Intermediate Algebra (3x)
- MATH 2303: Introduction to Probability & Statistic (3x)
- MATH 2331: Calculus II
- MATH 1331: Precalculus (3x)

Revonos *Operations Research Analyst I*

Castle Rock, CO
Jul 2020 to Present

Developing, testing and supporting statistical and optimization models for oilfield applications.

Optimizing NGL plants:

Uses PuLP to do the modeling and CBC to perform the solving.

Predictive Classifier:

Predicting failure and planning maintenance/replacement for oil pumps to maximize profit using RFC and SVM.

Detect Anomaly in Oil data:

identifying potential anomalies in the daily data at a rate of .008 using clustering k-means algorithm, Isolation Forests, Support Vector Machine.

Texas Tech University *Graduate Part-Time Instructor*

Lubbock, TX
Aug 2015 to Aug 2020

Responsible for preparing and delivering lectures, leading and moderating classroom discussions, administering and grading examinations and holding office hours.

Courses taught:

- MATH 3342: Mathematical Statistics for Engineers and Scientists (6x)
- MATH 2345: Introduction to Statistics with Application to Business
- MATH 2360: Linear Algebra (2X)
- MATH 1331: Introductory Mathematical Analysis II (2X)
- MATH 1451: Calculus I With Applications (3X)
- MATH 1550: Precalculus

Hyatt Convention Center *Banquet Server*

Denver, CO
Aug 2010 to Aug 2015

- Pre-set tables in banquet room following banquet set-ups, policies, and procedures
- Deal courteously and tactfully and serve meals to patrons according to established rules of etiquette, with ability to multi-task and prioritize well to meet deadlines
- Observe guests to fulfill any additional requests, and behaves with integrity, honesty and be open with guests and fellow associates
- Maintain the cleanliness of banquet areas

- Develops effective working relationship with fellow associates, managers, outside representatives and agencies
 - Tips Certificate
- May 2009

"Belhad" Bookstore, Copy Center and Cafe Net

Retail Sales Manager (family business)

Casablanca, Morocco

Sep 2002-Oct 2007

- Manage day to day operations.
- Research discount on products and negotiate prices for the store product.
- Deliver merchandise to storage and keep track on inventory.
- Manage customer complaints.
- Effective verbal communication skills.
- Success in managing a team of 2-5 employees.
- Proven track record of success in generating revenue in the retail industry

University of Colorado

Teaching Graduate Fellowship Assistant

Colorado Springs, CO

Aug 2014-Dec 2014

- Course taught: MAT 1040 (College Algebra) (2X)

University of Colorado

Lecturer

Denver, CO

Jan 2014 to Aug 2014

- Course taught: MAT 1110 (College Algebra)

Community College of Denver

Instructor

Denver, CO

Jan 2013 to Aug 2014

- Courses taught:

MAT 090 (Introductory Algebra), MAT 060 (Pre-algebra), MAT 050 (Quantitative Literacy) and MAT 071(Special Topics: Support for Liberal Arts Math) and MAT 055 (Algebraic Literacy)

Hill Campus School of Arts and Sciences

Student Teaching

Denver, CO

Spring 2012

The Brown Palace Hotel and Spa

Banquet Server, Housman

Denver, CO

May 2012 to Aug 2015

Courtyard by Marriott Cherry Creek Colorado

Banquet Server, Housman, Room Server, Restaurant Server

Denver, CO

Aug 2008 to Jan 2011

Sheraton Denver Down Town Hotel

Banquet Server, Busser, Food Runner

Denver, CO

Dec 2007 to Jan 2011

Publications

Belhad, A. Lauria, D. and Trindade, A. (2021). *(Under review)* “Nonparametric Estimation of Systemic Risk Via Conditional”. Statistics & Risk Modeling: Ms. No. strm-2019-0028

Skills

R, LaTeX (*Advance level*)

Python: NumPy, Pandas, Sklearn and PuLP (*Advance level*)

SQL, AMPL, C++, MATLAB, SAS (*Intermediate level*)

A+ Class at Metro State College of Denver with Grade A (Software and hardware pc troubleshooting)

Volunteering

UCAN Serve AmeriCorps

Denver, CO

900 hours as a tutor for grades 5 to 12 for Habitat for Humanity at Metro Denver

Jan 2011 -Dec 2011

Professional Development

National Council of Teachers of Mathematics

Aug 2015-present

Languages

English, Arabic: Fluent in writing, reading and speaking

French: Advanced in writing, reading and intermediate in speaking

Hobbie

Gardening, Hiking, Swimming, Cooking, Reading

John Richard Brzezinski

574-850-2505

john.richard.brzezinski@gmail.com

332 Channing St NE Washington, DC 20002

Homespire Mortgage Corporation, Gaithersburg, MD

VP, Secondary Markets/Lock Desk

Nov 2019 - Present

- Extensive use of Excel to model, analyze, and execute loan sales in secondary markets
- Utilizing Domo with SQL for daily reporting to company executives
- Use of Python and R to access public and private APIs for data exploration, warehousing, and analysis (statistical and modeling)
- Researching policy changes and trends for GSEs, capital markets, and financial regulatory agencies then communicating these changes to our executives and implementing company policies to stay inline
- Work in tandem with an analytics provider to hedge company interest rate risk and model mortgage attributes
- Manage \$570MM of credit lines that enable our interest rate hedging activities
- Maintain relationships with our correspondent investors and agency outlets
- Research and develop new loan and credit product offerings for our sales staff

Manager, Secondary Markets/Lock Desk

Nov 2015 - Oct 2019

- Created the department, including all policies and procedures
- Led the transition from a best efforts pipeline (~\$328MM/yr) to a mandatory pipeline (currently ~\$4.5B/yr) - increasing profits and flexibility in our product offerings
- Provided pricing and product support to the sales staff
- Manage the daily activities of the lock desk team
- Developed operational leakage reports to track losses and provide departmental metrics

Hometrust Mortgage Company, Birmingham, AL

Analyst, Secondary Markets/Lock Desk

Jan 2012 – Oct 2015

- Provided pricing and product support to the sales staff
- Created and analyzed reports for monitoring company leakage and profitability, forecasting closings, and developing pricing models for best execution analysis
- Executed loan sale trades with correspondent investors and GSEs
- Trained new employees on the lock desk
- Acted as the main liaison between investors and the sales staff

George Mason University, Volgenau School of Engineering Masters, Data Analytics Engineering

Aug 2019 - Current

Indiana University, Kelley School of Business

Dec 2011

Bachelor of Science in Business

- Majors: Marketing, Operations Management Minor: Economics

Miguel Richardson

Tallahassee, FL

(E): miguel2.richardson@gmail.com | (C): 813-525-5740

Professional Summary

Master of physics graduate (Expected 07/2021) with one year experience in national security and nonproliferation. One year experience using machine learning techniques for data analysis in Python. Background in mathematics, experimental design, data analytics, data visualization, computer programming, modeling and simulation.

Experience

Florida A&M University

Aug 2020 – Present

Graduate Student Researcher

- Investigated using neural networks to analyze spectroscopy data.
- Experimented with neural networks as alternative to using regression techniques for data analysis.

Pacific Northwest National Lab (PNNL)

May 2019 – May 2020

NNSA Graduate Fellow

- Built laser safety electronic circuits for lab compliance.
- Conducted Resonance Ionization Mass Spectroscopy (RIMS) experiments.
- Developed a resonance ionization scheme for Thorium. Applications towards nonproliferation.
- Used python based algorithms for data collection and analysis.
- Conducted lab inspections with Livermore field office to insure compliance.

Florida A&M University

Aug 2015 – May 2019

Graduate Student Researcher/TA

- Hosted C and Python programming workshops for undergraduate STEM students.
- Used Matlab for image processing and analysis of Raman spectral data.
- Built 3D blueprints of FAMU Spheromak using Solidworks.
- Plasma physics diagnostics and calibration using Langmuir probes and LabVIEW VI's.

Pacific Northwest National Lab (PNNL)

June 2017 – Aug 2017

Power Systems Engineer Intern

- Developed an algorithm in python to make real-time measurements on the power system.
- Algorithm designed to meet the IEEE standards on phasor measurement units (PMU).
- Optimized for use on a Raspberry Pi to simulate operation on a PMU.

Education

Florida A&M University - Tallahassee, FL

Masters of Science: Physics, (Expected 07/2021)

Bachelor of Science: Physics, 2015

Software/Skills

- C, C++, Python, SQL
- MPI libraries for C++
- Machine learning (Tensorflow)
- Matlab, SolidWorks, LabVIEW, MySQL
- Data collection, analysis, and visualization
- Lasers and optics
- Technical report writing and presentation

Michael Larson

Cell: 504-813-0964

Email: noae02@gmail.com

EDUCATION

Penn State University World

August 2018-December 2019

Master of Professional Studies, Data Analytics

- Predict online intention to purchase using the CRISP DM method and created multiple data models to find the most effective algorithm.
- Analyzed 2016 election campaign contributions stored in a relational database and Hadoop to gain insights into donor activities for future fundraising.
- Created visualizations using Tableau to show population changes by state and geographical regions from 2010-2018 to explain changes in voter trends.
- Created a model to identify properties for sale in NYC according to maximize profitability as a listing on Air BnB.
- Analyzed NYC crime data from 2017-2018 to predict the number of crimes by day to allocate personnel more effectively and facilitate proper hiring.
- Created an algorithm using donor information to target individuals for future contact.

University of Nebraska

August 1996-May2000

Bachelor of Science, Management

Bachelor of Science, Finance

PROFESSIONAL EXPERIENCE

Kay Jewelers

April 2018-July 2020

Assistant Manager

- Increased revenue and improved contact with clients by creating custom contact lists for employees using Salesforce.
- Analyzed individual associate performance and created improvement plans.
- Trained employees on new technology to increase utilization.
- Created sales and appointment goals for events to finish 10% over plan.
- Managed store operations: shipping, receiving, supply orders and scheduling.

Brookstone

July 2016-January 2018

Store Manager

- Created and analyzed trend reports for 16 stores in NC, SC, VA and MD to maximize sales and merchandise allocation between locations.
- Interpreted district reports and recapped them for 15 store managers on weekly call to improve key statistics within the district.
- Recruited, interviewed, hired, performed on-board activities and trained all staff within the store.
- Coached the staff on the development of their sales, merchandising, and customer service skills.
- Won Core Value Award for the Mid-Atlantic District for the Core Value of Teach for teaching other managers how to use new technology and interpret reports to improve their business.
- Managed a staff of 20 managers and associates.

Gameday Merchandising/Washington Nationals

August 2014-January 2016

General Manager

- Created reports using sales & trend data to project revenue, plan employee schedules, allocate merchandise between locations and purchase merchandise.
- Led a staff of 116 part-time employees and 3 assistant managers in 13 locations.
- Presented regular recaps to over 15 people working for Gameday Merchandising and Washington Nationals organizations.
- Analyzed and communicated data bi-weekly for 8 vendors to improve merchandise flow and selection.
- Created an introduction/training program to familiarize new employees with location policies, job expectations, sales techniques, and customer service best practices.
- Coached assistant managers on their personal development along with ways to develop their staff.
- Acted as the liaison between the team, buyer, retail vendors, ballpark contractors, and league office.
- Created and purchased merchandise for retail locations.

Neiman Marcus

January 2012-July 2014

Assistant General Manager-Merchandising

- Analyzed reports from multiple sources to maximize merchandise allocation, created sales budgets for each department, and improved store results.
- Managed the sales floor: merchandising, sales, customer service and visual displays for the entire store.
- Increased sales by 8.1% to \$5.5million.
- Increased customer service scores by 35% while maintaining #1 customer service rank.
- Recruited, interviewed, hired and trained all employees in the store.
- Ensured client contact for new arrivals, special events, and major sales.
- Contacted buyers to ensure proper merchandise for every department in the store.

Neiman Marcus

March 2008-January 2012

Department Manager

- Analyzed sales reports to increase sales, reallocate resources, and create budgets for the store.
- Increased sales by 12.5% in F12 for 2 departments to \$3 million.
- Interviewed, hired and trained new associates for the department.
- Created special events for the store to drive repeat business and increase customer loyalty.
- Coached associates in the moment on proper sales, customer service and merchandising standards.
- Contacted buyers to ensure proper merchandise allocation and maximize sales.

TOOLS

- | | | |
|--------------|---------------|--------------|
| • MS Office | • Tableau | • Python |
| • SQL | • R | • RStudio |
| • KNIME | • Java | • Minitab |
| • DBeaver | • Docker | • Hadoop |
| • PostgreSQL | • Apache Hive | • Apache Pig |

Faizan 'Fez' Nasir

Leesburg, VA 20176 • 806-470-3707 • fez.nasir@gmail.com

Data Analyst | Research Analyst

Highly motivated, fast learning consultant with extensive experience in data analytics, statistical modeling, predictive analytics, quantitative research, and risk assessment. Effective communicator and team collaborator with proven capability in extracting insights from data and presenting to clients and at industry forums. Adept at managing competing priorities and ensuring alignment with multiple stakeholders.

Knowledge Areas

- | | | |
|--------------------------|----------------------|------------------------|
| • Data Analytics | • Empirical Research | • Statistical Modeling |
| • Project Management | • Data Visualization | • Risk Assessment |
| • Microsoft Office Suite | • Power BI | • Stata |
| • Python | • SQL | • Product Management |

EXPERIENCE HIGHLIGHTS

INDEPENDENT PROJECT ANALYSIS, Ashburn, VA

Advanced Associate Research Analyst, April 2013 to Present

- Employ data analytics to develop statistical models for benchmarking and forecasting cost, schedule, and other project outcomes; develop and maintain detailed documentation highlighting model strengths and limitations
- Undertake empirical research on various topics focused on improving client project performance in terms of predictability, safety, competitiveness, and operability
- Conduct data collection through project team interviews at client sites globally and perform risk and benchmarking analyses that highlight front-end loading gaps and provide intervention recommendations
- Prepare written reports, presentations, executive summaries, and briefing materials to effectively communicate findings to clients globally
- Maintain and improve data collection procedures and tools
- Contribute to the development of in-house intellectual property; engage clients to support business development
- Assist in development of new proposals by investigating research feasibility using available or attainable data
- Review junior analysts' statistical models and research hypotheses to ensure error-free analyses
- Mentor and help develop new analysts by providing and facilitating training in research methodologies, data analytics and statistical modelling; also support in recruitment activities

Key Accomplishments:

- ☐ Served as Principal Investigator (P.I.) for a multi-client study focusing on Fortune 500 clients' project performance leading to development of new business product
- ☐ Led the development of a new data-driven risk assessment product aimed at improving client project predictability
- ☐ Served as P.I. for research study aimed at helping a large oil & gas contractor validate their value proposition, and be able to market their product to the right customers
- ☐ Led the testing, validation, and deployment of new automated workflow aimed at reducing analysis turnaround time and providing faster feedback to clients

Faizan 'Fez' Nasir

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TEXAS TECH UNIVERSITY, Lubbock, TX

Teaching Assistant, August 2011 to December 2012

- Taught and supervised undergraduate students as the graduate laboratory instructor for Core Analysis;

Key Accomplishments:

- Worked with vendor to set up advanced core flooding equipment for laboratory use

AGRIAUTO INDUSTRIES LTD, Karachi, Pakistan

Projects Engineer, November 2009 to August 2010

- Responsible for tracking multiple quality metrics using statistical control charts in pursuit of kaizen philosophy
- Perform time studies on various manufacturing processes to ensure plant productivity remains at optimal levels
- Develop PFC (Process Flow Chart) & PLC (Process Layout Chart); calculate process capacity and perform capability analysis; calculate manufacturing costs for new products
- Investigate ways in which the latest technology could improve the productivity of the manufacturing system
- ISO Documentation: Maintain work procedures, job responsibilities and formats related to work

Key Accomplishments:

- Served as PM for project aimed at improving plant atmosphere through better fume exhaustion. The project was completed on time, and within budget, leading to enhanced productivity
- Proposed new design for product handling in order to solve high defect rate. Supervised prototype development leading to an estimated improvement of over fifty percent

EDUCATION

Master of Science in Engineering | Texas Tech University, Texas, 2012

Bachelor of Science in Engineering | GIK Institute, Pakistan, 2009

PUBLICATIONS

- Luft, Astor, and Faizan Nasir 2018. *Understanding The Challenge Of Offshore Decommissioning*. Rio Oil & Gas
- Sheng, James J., and Faizan Nasir 2013. *A Comparative Experimental Study of Sweep Efficiency in Naturally Fractured Reservoirs*. Advances in Petroleum Exploration and Development 6.2 CSCCanada

VOLUNTEERING

- Emergency Medical Technician (EMT) serving the local community as part of Ashburn Volunteer Fire and Rescue Department

David W. Turner

📍 Scottsdale, Arizona ✉ davidturner2019@u.northwestern.edu ☎ 602.526.0237

Experience

Vice President Data Strategy

Pretium / Progress | March 2020 - Current

- Published research and commentary on market trends to c-suite, recommendations on pricing and acquisition action
- Provided guidance to business regarding capabilities and best practices when leveraging data & advanced analytics
- Developed acquisition and pricing tools/models to help scale the 55k single family residential portfolio
- Presented complex information in a thoughtful and easy-to-understand manner for different levels of sophistication

Director Data & Analytics

Invitation Homes | July 2019 - March 2020

- Lead a small team (4 FTE) maintaining and enhancing IH's data; building pipelines and analytical tools
- Directed migration of all database environments from SoftLayer to AWS
- Integrated data sources (*Salesforce, Yardi, Marketing Cloud, Transunion, Ring Central, CMP, Smart Rent, Qualtrics*)

Data Scientist

Invitation Homes | Dec 2016 - July 2019

- Partnered with a variety of teams, finding opportunities to leverage data and analytics, building tools and improving processes
- Cash-for-keys breakeven, ROI renovation dollars, natural language processing vendor charges, combustion/occupancy tradeoff, etc

Investment Analyst

Invitation Homes | June 2016 - Dec 2016

- Analyzed macro/micro market trends. Modeled, negotiated, and acquired ~\$100mm in SFR across the nation

Education

Northwestern University

- MS Data Science: Artificial Intelligence | Spring 2019
- Coursework: *Machine Learning, Deep Learning, NLP, Statistical Modeling, Decision Analytics, Finite Mathematics & Calculus, Statistics*

Arizona State University

- Bachelors: WP Carey | Spring 2014
- Coursework: *Statistics, Finance, Economics*

CFA Level I Candidate | Nov 2021

Skills

- Python [*tensorflow, keras, scikit, numpy, scipy, sklearn, matplotlib, pandas, nltk, jupyter*]
- R [*caret, party, ggplot, h2o, parallel, lime*]
- Tableau / Power Bi / Looker

Joshua Seideman, Ph.D.

(336) 955-5739
Seidemanja@gmail.com
Washington, DC

Work Experience

National Institutes of Health / Lexical Intelligence

2020 – present

Scientific Portfolio Analyst (Contractor)

- Wrote section of strategic plan for the NIH Office of Portfolio Analysis
- Analyzed extensive federal grant data (e.g., investments, research outputs) using Python and Excel
- Created PowerPoint presentation deliverables – generated graphs, drafted and edited all slide text
- Served as portfolio analysis consultant to clients at various NIH institutes (provided advice and analysis)
- Liaised between team of analysts and NIH leadership (client), to define project scope and deliverables
- Coordinated team of analysts to meet deliverable expectations (quality and schedule)
- Taught virtual classes to train NIH employees to perform grant portfolio analyses
- Developed a mentoring program for new hires – created project charter and helped implement program
- Hiring – reviewed applications for analyst position, interviewed applicants (virtual meetings, phone)

Wake Forest School of Medicine

2014 – 2020

Graduate Research Assistant (PhD)

- Designed and conducted neuroscience experiments (neural basis of decision making)
- Wrote NIH-funded grant proposal (\$135,000, across 3 years)
- Gathered, analyzed, and modeled behavioral and neural data (MATLAB, eye tracking, electrophysiology)
- Applied advanced statistical methods – bootstrap, permutation test, linear regression, AUROC
- Presented findings at numerous national and international conferences
- Wrote [four first-author publications](#) — including one in [Nature Communications](#)

New York University

2012 – 2014

Research Assistant

- Collaborated with a multidisciplinary team of scientists on a complex, DARPA-funded project
- Gathered and analyzed behavioral and neural datasets (MATLAB, motion capture, electrophysiology)
- Contributed to an abstract/poster presented at an international conference

Education

PhD, Neuroscience – Wake Forest University

2014 – 2020

BA, Biology. BA, Psychology – Boston University

2006 – 2010

Technical Skills

◆ Writing ◆ Python ◆ MATLAB ◆ Excel ◆ PowerPoint

Academic Service

Wake Forest Neuroscience Graduate Admissions Committee

2015 – 2020

Representative

- Reviewed applications and interviewed applicants (in person, virtual, phone)
- Represented the Graduate Program at international conferences (recruitment)
- Led a team of graduate students to organize recruitment events – booked venues, catering, travel

Awards and Honors

NIH National Research Service Award – Predoctoral Fellowship (F31)	2018 – 2020
Norman M. Sulkin Award in Neuroscience, Wake Forest School of Medicine	2019
Society for Neuroscience (SfN) Trainee Professional Development Award	2017
NIH Predoctoral Training Grant Appointee (T32)	2014 – 2016
NIH Intramural Research Training Award – Postbaccalaureate Fellowship	2010 – 2012

Published Articles

Seideman, JA, Stanford, TR, & Salinas, E. (2021). The spatial signal in area LIP is not an obligatory correlate of perceptual evidence during informed saccadic choices. [bioRxiv, 431470](#).

Seideman, J. (2020). The roles of frontal and parietal neurons in informing perceptual choices made under urgent temporal uncertainty ([Doctoral dissertation](#), Wake Forest University). ProQuest, 28088659.

Stonebarger, GA, Urbanski, HF, Woltjer, RL, Vaughan, KL, Ingram, DK, Schultz, PL, Calderazzo, SM, **Seideman, JA**, Mattison, JA, Rosene, DL, Kohama, SG. (2020). Amyloidosis increase is not attenuated by long-term calorie restriction or related to neuron density in the prefrontal cortex of extremely aged rhesus macaques. [GeroScience, 42](#).

Seideman JA, Salinas E, Stanford TR. (2019). Perceptual modulation of parietal activity during urgent saccadic choices. [bioRxiv, 874313](#).

Seideman JA. (2019). A dynamic, imperturbable link between midbrain activity and saccade velocity. [Journal of Neurophysiology, 123](#).

Salinas E, **Seideman JA**, Stanford TR. (2018). When the simplest voluntary decisions appear patently suboptimal. [Behavioral and Brain Sciences, 41](#).

Seideman JA, Stanford TR, Salinas E. (2018). Saccade metrics reflect decision-making dynamics during urgent choices. [Nature communications, 9](#).

Published Abstracts / Presentations

Salinas E, **Seideman J**, Stanford T. Spatial differentiation in area LIP dissociated from evidence accumulation. *Cosyne Abstracts* 2021, Online.

Seideman J, Salinas E, Stanford T. Rapid perceptual modulation of PPC activity predicts concomitant changes in urgent-decision accuracy. *Cosyne Abstracts* 2019, Lisbon, PT.

Oor EE, **Seideman JA**, Stanford TR, Salinas E. Target-feature and outcome histories prime perceptual speed and efficiency in an urgent visual search task. Prog. No. 061.22. San Diego, CA: *Society for Neuroscience*, 2018.

Seideman J, Stanford T, Salinas E. Saccade kinematics communicate covert decision-related computations during urgent choices. *Cosyne Abstracts* 2018, Denver, CO, USA.

Seideman J, Salinas E, Stanford TR. Sensory cue processing time modulates LIP neuronal activity in parallel with urgent choice accuracy. Prog. No. 060.25. Washington, DC: *Society for Neuroscience*, 2017.

Seideman J, Scerra VE, Salinas E, Stanford TR. Saccade metrics reflect decision-making dynamics during urgent choices. Prog. No. 717.05. San Diego, CA: *Society for Neuroscience*, 2016.

Putrino D, Wong YT, Weiss A, **Seideman J**, Pesaran B. Using virtual reality environments to train high-dimensional control of a virtual upper limb prosthetic. Prog. No. 80.16. San Diego, CA: *Society for Neuroscience*, 2013.

Wylie A, **Seideman J**, Yu D, Blackwell C, Mishkin M, Turchi J. Dopaminergic and cholinergic mediation of within session concurrent discrimination learning. Prog. No. 580.04. San Diego, CA: *Society for Neuroscience*, 2013.

Taylor (Yi) An

(612) 454-9962 • anxxx188@gwu.edu • www.linkedin.com/in/yi-an

EDUCATION

George Washington University, School of Business

Washington, D.C.

Master of Science, Information Systems Technology (GPA: 3.87)

May 2021

- *Relevant Courses:* Database Management, Statistics for Analytics, Machine Learning, Python Programming, IoT Management

University of Minnesota Twin Cities

Minneapolis, MN

Bachelor of Arts, Economics

December 2017

Minor: Management – Carlson School of Management

- *Relevant Courses:* Regression & Correlated Data, Probability, Cost-Benefit Analysis, Project Management, Econometrics

EXPERIENCE

George Washington University

Washington, D.C.

Graduate Teaching Assistant

January 2021 – May 2021

- Taught and managed Graduate course ISTM 6209 – Web and Social Analytics. Led a class of 40 and held individual tutoring sessions
- Mentored and trained graduate students using R, Python and Google Analytics to analyze and report digital data concerning customer behavior and marketing optimization, identifying key performance indicators, and evaluating new business models
- Executed, debugged, and optimized students' coding programs; Monitored homework and exam gradings

Wanyin Capital

Beijing, China

Analyst Intern

January 2019 – August 2019

- Performed data ETL and designed pipelines that automated revenue forecasts for over 20 companies in Python and SQL; Built visual dashboards in Tableau to facilitate data-driven decision making
- Designed and implemented a SQL data warehouse to improve client data storage system; Transported existing data to database and reduced time spent on data querying by at least 30%
- Initiated data centric market research and customer analysis to evaluate product competitiveness
- Collaborated with cross-functional teams; Delivered presentations for critical stakeholders; Secured a Series A funding for a liquid crystal film manufacturer of \$10 million.

RELEVANT PROJECTS

Full Stack Web Design: ClubPlus Website

March 2021

- Implemented a Sport Membership Management platform using AWS EC2 as backend, PHP, JavaScript, HTML and CSS as frontend
- Designed and developed data structure and capacity planning; Performed problem diagnosis, initiated problem resolution, and provided ongoing life-cycle support for technology deployment; Coded complex SQL queries in business environment with large-scale dataset
- Led a team of 4 and designed business implementation strategy; Identified business goals, estimated business risks and competitiveness benchmark, evaluated system cost and ROI
- *Utilized:* SQL, DDL, PHP, Javascript, HTML, CSS, Visio, AWS EC2, Data Warehouse Management, Scrum

Airbnb Ratings Analysis

January 2021

- Implemented data importation and modeling pipelines for over 3GB data, with more than 9 million records; Designed and optimized database storage system
- Performed text mining on customer reviews and generated text embeddings; Trained Logistic, Gradient Boosting models to predict listing ratings
- *Utilized:* Scala, SparkSQL, ApacheSpark, XGBoost, Natural Language Processing, ETL, Databricks

Analytical Project: Heat Failure Prediction

October 2020

- Cleaned and processed imbalanced data; Conducted feature engineer and performed exploratory data analysis
- Trained Logistic, K-Nearest Neighbors, Random Forest models on over 280,000 patient profiles; Arrived at a final model with 86% f1-score
- *Utilized:* Python (Scikit-learn, Pandas, NumPy, Seaborn, SciPy), Data Wrangling, EDA, Machine Learning

Analytics Project: Customer Behavioral Analysis

August 2020

- Conducted statistical analysis and experimented design on two sets of business data in R; Collected clickstream data, identified key metrics and performed A/B testing to measure the performance of a Restaurant Grades' newly implemented feature
- Performed customer segmentation using KNN; Built regression models to predict factors that contributed to booking conversion rate across 11 hotel booking platforms; Received 100/100 in the final presentation
- *Utilized:* R (ggplot2, dplyr, tidyr, caret), Statistical Experiment, A/B Testing, Regression modeling

TECHNICAL SKILLS

- **Programming:** SQL, Python, R, Scala, HTML, JavaScript, PHP, STATA
- **Platform/Tools:** MongoDB, Neo4j, Databricks, Tableau, Visio, AWS EC2, Advanced Excel, Salesforce
- **Analytics:** Data Visualization, Database Management, Big Data Querying, Data ETL, Modeling, Statistical Inference

GAURAV SIPANI

Dallas, TX | gsipani21@gmail.com | (469) 441 6790 | www.linkedin.com/in/gauravsipani | <https://github.com/gsipani21>

EDUCATION

University of Texas at Dallas

Master of Science, Business Analytics

May 2021

GPA: 3.56/4

University of Mumbai

Bachelor of Engineering, Information Technology

May 2017

GPA: 3.4/4

TECHINICAL SKILLS

Languages: Python, SQL, R, Java

SAP: HANA, Business Warehouse, Business Object

Modelling: Hypothesis Testing, Regression, PCA, Classification

Certificate: Appian LVL 1 (InProgress), KPMG Data Analytics Virtual Internship, Alteryx Designer Core

Analytical Tools: Tableau, MS – Excel, SAS, Alteryx, Databricks

Database: MySQL, MS SQL Server, Hadoop, AWS (S3, Glue)

BPM Tool: Appian, MS Office

WORK EXPERIENCE

Ampliflex Inc: Closter, NJ | Data Science Intern

Jun 2020 – Aug 2020

Supply Chain Event Management Project:

- Built a basis **ETL** in Azure Databricks that ingested transactional and event data from Web with 100K daily active users that saved over \$40,000 annually in external vendor costs
- Predicted delay in shipments transit time affected by events using **Regression Models** in **Scikit Learn**, achieved 77% accuracy
- Identified & implemented solution to **automate reporting** using SQL & Tableau; reduced 2 days manual work to 10 min runtime

Kansai Nerolac Paints Ltd: Mumbai, India | SAP Business Intelligence Analyst

Jun 2017 – Jul 2019

- Gathered business requirements and created SRS DDS Document for implementation of BW on HANA using ASAP Methodology
- Designed and implemented **Process chains** using SAP HANA to perform **ETL** of data from **6+ sources** and stored the processed data into Data Store Objects (DSO) in SAP BW system
- Worked with Marketing team to analyze the sales data using **SQL & Excel** for **customer segmentation** based on certain KPIs; identified top **20K** dealers to target that boosted **Sales revenue by 10%**
- Created **Workforce Performance Dashboard** in SAP BO for Plant Managers for analysis of plant workers yearly performance

ACADEMIC PROJECTS

Sprocket Central – Marketing Analysis

Mar 2021 – Apr 2021

- Analyzed Customer & Sales Transactional datasets for Data Quality Assessment & Data Exploration to gather data insights
- Performed Recency, frequency, monetary value (RFM) analysis for customer segmentation, identified top 1000 customers to target and proposed actionable insights with a Dashboard using Pivot tables, Charts, Formulas, VLOOKUP

Forecasting Cancer Mortality Rate – Machine Learning

Oct 2020 – Dec 2020

- Performed Statistical Analysis on ~5000 data samples using Pandas, Matplotlib in **Python** to detect patterns in Mortality Rate
- Experimented with various Regression Algorithms in Scikit-Learn to predict death rate; SVM performed best with 81% accuracy

Mobile Advertisement – Predictive Analytics

Oct 2020

- Uploaded CSV files into **SAS** system and processed the data to draw insights; identified trends in installation of App based on ads publisher & customer characteristics using **DATA, PROC** steps
- Developed **Regression** Models to predict probability of installing ad and estimated cost of \$202 for displaying ad per customer

SQL – Mongo Project – Spatial Data of US Wildfires

Nov 2019 – Dec 2019

- Migrated 1.8 Billion Row data from SQLite to MySQL and MongoDB, designed 3NF ER model and created tables using DDL
- Programmed SQL & NoSQL Complex queries to analyze and support some claims made about spatial data of Forest Fire in US

David Chan

11300 Coral Gables Drive, North Potomac, MD 20878 | Tel: 301.676.1414 | David.chan.107@gmail.com

SUMMARY

Analytical Master degree candidate specializing in data science seeking a challenging position with growth opportunities in the information technology field.

EDUCATION

University of Maryland – College Park, Maryland
Master of Professional Studies, December 2021
Major: Data Science and Analytics
GPA: 3.7/4.0

University of Maryland – Baltimore County, Maryland
Bachelor of Science, December 2019
Major: Information Systems
GPA: 3.3/4.0

TECHNICAL COURSE HIGHLIGHTS

- Big Data Systems
- Principles of Machine Learning
- Data Structures
- Introduction to Database Design
- Network Design & Management
- Probability and Statistics
- Software/Hardware Concepts
- Introduction to Linear Algebra
- Applied Statistics for Business & Economics
- Principles of Data Science
- Data Representation and Modeling
- Natural Language Processing
- Database Application Development
- Structured Systems Analysis and Design
- Data Communications and Networks
- Decision Support Systems
- Math Concepts in Computing I, II
- Technical Communication

COMPUTER SKILLS

Languages with 0 – 1 years of experience: Oracle, HTML, CSS, PHP, JavaScript
Languages with 1 – 2 years of experience: Java, Python, SQL
Microsoft Office Applications: Excel, Word, PowerPoint

JOB EXPERIENCE

Corporate University, Federal Deposit Insurance Corporation

Student Trainee

June 2018 – April 2020

- Provided analytical reports to assist management to plan and track the bank examiners' completion progress on the FDIC mandatory training courses.
- Conducted research assignments on user experience and presented the findings to the Educational Support Services management.
- Created and updated spreadsheets to document changes in job level benchmarks in support of training bank examiners.
- Created numerous high priority course offerings for FDIC employees in a high-visibility environment.
- Resolved stakeholders' issues and queries on the FDIC Learning Management System.
- Tested and maintained online courses in the FDIC Learning Management System.
- Maintained records on staff completion of mandatory training and reminded those who did not.
- Reviewed training curriculums and provided recommendation on different options to offer training courses and incremental improvements to the Learning Management System.
- Provided technical support to FDIC employees who were experiencing difficulties with using the Learning Management System.

Occupational Safety and Health Administration (OSHA), U.S. Department of Labor

IT Specialist, Department of Enterprise Governance

June-August 2017

- Conducted small scale research assignments and presented the findings to the Cybersecurity Division.
- Completed a survey on various malware and detection methods, and their impacts to OSHA and regulations compliance.
- Contacted OSHA federal employees to remind them to complete security training and updated their contact information.
- Created spreadsheets to document changes in the Department of Enterprise Governance's IT policies.
- Listened to meetings and sent notes to management within the Cybersecurity Division.
- Trained to create and maintain websites using Microsoft SharePoint.

HONORS AND EXTRACURRICULAR EXPERIENCE

- HackUMBC 2016 - Developed a mobile application to port a stream from twitch.tv which showed a specific character in the game "League of Legends".
- AP Scholar with Honors by The College Board
- Commended Student by National Merit Scholarship Corporation
- SAT score 1430 (Critical Reading 670, Mathematics 760)
- Harvest Christian Fellowship - Led small group bible studies throughout the year
- Community activities included participation in World Vision 30 Hour Famine program, Organization for Humanitarian Aid, multiple church outreach activities and student and children programs.

ESTEBAN PABON

1771 Lang Pl NE • Washington, DC 20002 • (240) 449-6829 • e.pabon.s@gmail.com

EDUCATION

December 2016

University of Maryland, College Park, MD

Master of Professional Studies in Applied Economics

December 2014

University of Maryland, College Park, MD

Bachelor of Arts in Economics, Government and Politics,

Minor in International Development and Conflict Management

- Recipient of the Kenneth G. Vaughn Memorial Scholarship, Recipient of the Multiethnic Studies Award for Academic Excellence. Member of Phi Theta Kappa Honors Society. Dean's list

EXPERIENCE

April 2017 –

Present

Summit Consulting LLC, Washington, DC

Consultant, Risk Management and Capital Assessment Projections

- Performed portfolio monitoring and valuation of FHA's Home Equity Conversion Mortgages portfolio
- Conducted independent validation and verification of Ginnie Mae's financial and econometric models
- Validated econometric models and business tools used for operations across various divisions at FDIC
- Supported FDIC in the development of Validation Standard Operating Procedures and best practices

Senior Analyst, Federal Credit Modeling and Forecasting

- Standardized data analytics processes and MRM best practices for the Pre-trial Service Agency (PSA)
- Redesigned agency performance metrics and created reporting dashboards for agency wide operations
- Developed cost estimates akin to CBO for campaign policy proposals based on economic assumptions

Analyst, Federal Credit Modeling and Forecasting

- Supported a cost-benefit analysis study of various policy scenarios for the Department of the Treasury
- Provided statistical and econometric support in redlining investigations for the Department of HUD
- Developed a VBA Excel tool to forecast future fee revenue incorporating economic assumptions

January - April
2016

American Enterprise Institute, Washington, DC

Research Intern, Office of Poverty Studies

- Researched and wrote memos on proposed legislative or policy changes to the American safety net programs and their implications on the population with an income near the Federal Poverty Line
- Analyzed data and statistical validity of relevant research for the Poverty Studies Department

January - June
2014

Office of Governor Martin O'Malley, Annapolis, MD

Intern, Office of Intergovernmental Affairs

- Attended bill hearings and wrote summaries of bills that were introduced and information regarding opposition and support groups, and political implications for the office of Governor O'Malley
- Researched important issues for the state of Maryland and summarized main points of concern

June - September
2013

CARE International, Chuquisaca, Bolivia

Intern, Project TUKUY YANAPANA

- Developed an institutional and political analysis of the rural areas where the project was executed
- Systematized the process of exportation of organic and certified crops in rural areas to the EU

AWARDS

Summit Consulting LLC, Washington, DC

Recipient of the "Ask Not Award", "Capacity Development Award", and "Pinnacle Award"

ACTIVITIES

University of Maryland Economic Society, Member

Youth Soccer Coach, Volunteer

A Wider Circle, Volunteer

SKILLS

Computer: SAS (Certified Specialist Base Programming), STATA, EXCEL, Microsoft Office

Language: Spanish native, English fluent, Italian intermediate

CHAITANYA KULKARNI

chaitanyacsk@vt.edu | 540-449-4795 | Blacksburg, VA | www.linkedin.com/in/chaitanyakulkarni-csk

EDUCATION

Master of Science: Industrial Engineering(Machine Learning Track) Expected May 2021
Virginia Tech GPA: 3.94/4
Relevant Coursework: Data Analytics I, Probability Distribution Theory, Advanced Machine Learning, Deep Learning, Advanced Regression Methods, Optimization, Advanced Supply Chain Management, Data Analytics II
Bachelor of Technology: Mechanical Engineering, 2015 - 2019
VIT Vellore GPA: 9.0/10

SKILLS

Programming Python(Numpy, Pandas, scikit-learn, SciPy), R, MATLAB, SQL
Frameworks Pytorch, Keras, Tensorflow, OpenCV, Git, caret
Data Analysis and Visualization Tableau, Excel, Matplotlib, Seaborn, Minitab

EXPERIENCE

Graduate Research Assistant Sept 2019 - Present
Virginia Cognitive Systems Engineering Lab, Virginia Tech Blacksburg, VA
Surgical Skill Assessment using Machine Learning

- Working on building an classification model that predicts expertise in surgical tasks.
- Discovered and analyzed novel predictive metrics from eye-tracking video data.
- Trained a Heatmap regression model that detects and localizes tools in surgical videos.

Conference Paper

- Designed a Augmented Reality based platform that leverages a CNN architecture aimed at reducing accidents in factory settings. Published and presented the work in HFES conference.
- Submitted a conference paper titled 'Differentiating Laparoscopic Skills of Trainees with Computer Vision Based Metrics'.

Graduate Teaching Assistant Jan 2020 - May 2020
Virginia Tech Statistics Department, Virginia Tech Blacksburg, VA
• Provided assignment and project guidance involving grading and proctoring for undergraduate stat majors.
• Worked at Statistics lab guiding non-stats majors in basic statistics and data analysis.

PROJECTS

M5-Forecasting.

- Appeared in top 1% rank in annually held forecasting competition.
- Analyzed hierarchical time series data of sales of over 30,000 different products.
- Tested models like ARIMA, N-beats, LGBM and optimal reconciliation methods for forecasting sales over a 28 day horizon.
- Proposed a novel ensemble model for sales prediction in data of 12 hierarchical levels and reduced error by 7%.

Egocentric eye-gaze prediction.

- Redefined the previous problem approach and reduced Average Angular Error by 40%.
- Built a model that predicts gaze point in videos by employing a two-stage 3D CNN referring Zhang et al paper.
- Deployed the model as an expert gaze-imitator for building a platform geared towards training novice surgeons.

Generating SQL queries from natural language(Deep Learning Project).

- Implemented a Bi-directional LSTM based model referring to SQLNET for converting natural language to an SQL query.
- Boosted the execution accuracy by 2% by proposing a new attention model.

Vehicle Localization for self-driving cars(Advanced Machine Learning Project).

- Deployed a deep convolutional neural network (CentreNet architecture) from scratch to detect vehicles in an image.
- Performed a comparative study of ResNet and VGGNet as backbone architectures.
- Achieved an F1-score of 0.6 on test set.

Predicting a Company's Success.

- Implemented predictive classification models on Crunchbase' data to determine probability of success of a start-up.
- Tuned and tested models like Regularized Logistic regression, XGBoost and KNN and achieved an F1 score of 0.45.

EXTRA-CURRICULAR ACTIVITIES

- Served as a session chair for HFES 2020 conference.

Mingchuan (Jeff) Yang

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SUMMARY

2 years of experience in data analytics by manipulating complex SQL queries, R&Python scripting, and BI visualizations. Worked with technical managers and project managers to successfully interpret business, generate insights, and solve problems in financial and international development industry.

Programming: SQL(MySQL, SQL Server), **Python**(Numpy, Pandas, Matplotlib, Dash), **R**(Tydiverse), **VBA**

Application: Tableau, Power BI, Microsoft Excel (pivot table, vlookup), Powerpoint, Jira, Lucidchart

Machine Learning: Linear Regression, Logistic Regression, KNN(K-Nearest Neighbors), Random Forest

PROFESSIONAL EXPERIENCE

MSI, A Tetra Tech Company

Arlington, VA

Data Analyst Intern

Jan 2020 - Present

- Processed, cleaned, manipulated 11000+ raw data and built data pipeline and dashboard to monitor key metrics and trends using Excel and R packages such as dplyr, tidyverse
- Designed and automated **financial indicators** dashboard to track key metrics such as delinquent loan, saving balance for Bangladesh project using R Shiny, which reduced data processing time by 40%
- Conducted demographic information such as **education level**, **income level** using multi-linear regression model to forecast regional employability and income and evaluate performances of the business initiatives
- Created online survey about the perception of USAID for Afghanistan project, which improved data collective efficiency and reduced project time by 10%
- Collaborated with technical manage to formulate and complete full cycle analysis including data gathering, data analysis, and ongoing deliverables

International Leadership Foundation

Washington, D.C.

Data Analyst Intern

Oct 2018 - Feb 2019

- Utilized Excel functions such as VLOOKUP and pivot table to integrate and analyze 2000+ applicants data records to help organization with decision-making in updating fellowship policy
- Led a small team to research universities' career sites, coordinated with university career services to identify potential applicants for Civic Fellowship Program and successfully recruited 100 students
- Processed, cleaned, and transformed over 100 applications and visualized data using histograms, bar plot, and pie chart for displaying KPI metrics such as major, gender, and age

ACADEMIC PROJECT

NBA Statistic Interactive Dashboard

- Led a team of 5 cleaning data, transforming, and building dashboard by Python packages such as numpy, pandas, and dash, to reduce data processing time 30%
- Increased 50% accuracy in predicting the final champion team and player awards by KNN model

Insurance Database Design

- Planned analytics process from evaluating data quality by identifying benchmarks, extracting, and modifying nearly 3000 insurance data from MS SQL Server
- Designed stored procedure in SQL to execute weekly data transferring, which saving time of 40% on weekly basis and reducing server memory usage

R Shiny App Development

- Visualized 3000 FIFA soccer players' information into bar plots and tables by R Shiny and added features such as drop-down menu, to increase users' interactivity
- Created an interactive App/dashboard using Shiny to help clients discover and compare players according to their score and position

EDUCATION

THE GEORGE WASHINGTON UNIVERSITY

Washington, D.C.

Master of Science in Information System Technology

Sep 2018 - May 2020

Graduate Certificate in Business Analytics

Relevant Courses: Programming in Python & R, Data Mining, Statistics for Analytics, Relational Database

UNIVERSITY OF MINNESOTA

Minneapolis, MN

Bachelor of Arts in Mathematics

Jan 2015 - May 2018

Relevant Courses: Statistics (Bayes Theorem, ANOVA), Stochastics (Markov Chain)

Education

Tulane University, Graduate Business School

Master of Business Analytics with a Specialization in Energy

New Orleans, LA

Exp. Graduation: May 2021

- **GPA:** 3.56, Tulane Business Analytics Club (Vice President & Co-Founder)
- Relevant Coursework: Business Statistics & Modeling with R, SQL Data Fund & B.I., Modeling & Analytics, Web Analytics, BA Practicum, Energy Risk Management, Energy for Sustainable Development, Adv. Modeling & Analytics, BA Projects
- **Externships:**
 - Phelps Dunbar LLP, New Orleans LA – Data Science Intern February 2021 – Present
 - Danos Inc, New Orleans, LA – Renewable Energy Intern January 2021 - Present
 - New Orleans Saints & Pelicans, New Orleans LA – Business Intelligence Intern Oct. 2020 - January 2021

Tulane University, A.B. Freeman School of Business

Bachelor of Science in Management in Finance and Marketing

New Orleans, LA

Graduated May 2020

- Graduated Cum Laude with Honors; Dean's List (3 Semesters), Greenbull Investment Club, Toastmasters
- Relevant Coursework: Intermediate Financial Accounting, Advanced Corporate Finance, Investment in Equities, Fixed Income, Valuation & Finance, Risk Management, Venture Capital, Macroeconomics, Intro to Computer Science I & 2, Discrete Math

Professional Experience

Phelps Dunbar LLP, New Orleans, LA – Data Science Intern

February 2021 – Present

- Restructured timesheet documents through data wrangling, data exploration, and data processing in Python libraries (Numpy and Pandas) to track business performance, increase efficiency, and create specifications for datasets based on company requests
- Prepared reports that interpreted employee behavior and productivity trends with goals to improve employee efficiency by 10%

New Orleans Saints and Pelicans, New Orleans, LA – Business Intelligence Intern

October 2020 – January 2021

- Leveraged BA tools in R, Radiant, and Tableau to create dashboards, identify customer trends, and determine player insights
- Used various clustering techniques to improve the monetization of merchandise sales suggesting opportunities for improvement
- Formulated statistical techniques for analyzing data, found correlations between players, and used sampling coupled with linear regression to interpret trends in ticket sales data to determine a customer's elasticity to price changes for key season months
- Arrived at conclusions for optimal pricing for 2020-2021 ticket sales formulating recommendations to company management

Chartwell Financial Advisory, Chicago, IL – Investment Banking Summer Analyst

June - August 2018; July - August 2020

- Performed Precedent Transactions, Comparable Companies, and DCF analyses to derive enterprise values and per-share fair market values for numerous private firms; created 5-year projection forecasts for live M&A deals; and researched ownership information
- Leveraged financial databases to screen for publicly traded companies and precedent M&A transactions, including PitchBook and S&P Capital IQ, to find potential M&A opportunities for advisory clients on live M&A deals gaining an understanding of client needs
- Spearheaded an ESOP project presented to senior management which sought to determine which dividend option was best suited for minority shareholders to repurchase retired shares of a primary Shareholder under different underlying base case scenarios
- Participated in a Training the Street workshop and Chartwell University covering the fundamentals of Financial Modeling & Sensitivity Analysis, Public & Acquisition Comparables, DCF Analysis, Leveraged Buyout Analysis, and Merger Consequences Analysis

iSelect Management Fund, St. Louis, Missouri – Venture Capital Summer Analyst

June - August 2019

- Worked at an evergreen Venture Capital fund focused in agriculture, healthcare, & resource efficiency committed to investing in early-stage companies in several different Series of funding gaining extensive experience in due diligence & emerging market trends
- Analyzed & influenced firm decision-making by frequently attending hundreds of Pitch Deck presentations from startups five hours per day with portfolio companies & potential target companies during every stage of the due diligence process
- Researched Aquaculture & Soil Health startups; published two “deep dive” *webinars* distributed to investors and company insiders
- Constructed private placement valuations, drafted term sheets, & prepared selection committee data for managing partners
- Discovered numerous startups for iSelect's portfolio pipeline through vigorous competitive analysis & gained apprentice knowledge from meetings and some of these early-stage companies were added to iSelect's portfolio for potential investment

Global Asset Advisors, Chicago, IL – Summer Futures & Options Broker

June - August; 2015, 2016, 2017

Series 3 – National Commodities Futures Examination – Certified in 2016

- Communicated daily with 100-150 prospective retail futures clients resulting in several successful account openings
- Worked closely with Senior Brokers to understand the intricacies of the futures' & options' markets, including technical analysis skills
- Implemented risk management and trading strategies to help clients optimize their portfolios with an eye for industry trends
- Spearheaded an initiative to modernize & streamline the company's existing filing system by digitizing documents into a new database
- Strengthened communication skills with participation in biweekly sales meetings which polished sales techniques via recorded sales call reviews and bolstered my futures trading acumen in grains
- Authored *A Farmer's Guide to the WASDE and Grain Reports* and *A Farmer's Guide to Credit Lending Margin*; advisory reports for clients that drove increased value added for the firm's services

Certifications, Skills, and Interests

- **Language Proficiencies:** Python, Java, R, Tableau, Radiant, SQL, Microsoft Excel, PowerPoint, Microsoft Office Suite, Basecamp
- **Other Proficiencies:** S&P Capital IQ, PitchBook, CRM Software, HubSpot, Bloomberg Certified, Valuation, VBA
- **Personal Interests:** Macroeconomics, Financial Modeling, Futures & Options Trading, Golf, Fly-Fishing, Exercise, Travel

Emmanuel Olutayo Akinlabi, Ph.D

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SUMMARY

An applied mathematician with over 5 years research experience in academia on mathematical modeling and large-scale data analysis. Committed to helping companies achieve their goals by helping them to develop strategic plans and deliver valuable data based on data analytics and predictive modeling. I am available for a full-time position where I can utilize my research, programming, analytical and communication skills.

SKILLS

- Strong analytical skills
- Research
- Excellent communication
- Presentation skills
- Database management
- Data wrangling
- Predictive modeling
- Data structure/Algorithms
- Sensitivity analysis
- Machine learning/AI
- Functional analysis
- Optimization
- Project management
- Cloud computing (AWS, Google Cloud Platform)
- Statistical analysis
- Partial Differential Equations (PDEs)
- Time series analysis

SOFTWARE

- Python (*Numpy, Statsmodel, Scipy, Scikit-learn, Pandas etc*) – Expert
- Data visualization (*Seaborn, Matplotlib*) – Expert
- Tableau – Intermediate
- R programming - Intermediate
- FORTRAN - Intermediate
- MATLAB – Expert
- Database (SQL, NoSQL) – Intermediate
- Cloud computing (IBM Watson Studio, AWS, Google Cloud Platform) - Intermediate
- Apache Spark
- Microsoft office suite (*MS Excel, MS Powerpoint, MS Word, MS Access*) – Expert
- Windows and Linux/UNIX based platforms - Expert

EDUCATION

- University of Warsaw | Warsaw, Poland

Ph.D (Physics) - July 2020

Research: *Analysis and reconstruction of small scales of atmospheric turbulence*

- **University of Warsaw | Warsaw, Poland**

M.Sc (Physics) – March 2018

GPA: 4.48/5.0

Specialty - Mathematical and computer modeling of physical processes

Research: *Simulation of Cerebrospinal fluid (CSF) flow with Finite Pointset method (FPM)*

- **African Institute for Mathematical Sciences | Senegal**

M.Sc (Mathematical science) – June 2016

Grade: Distinction

- **Ladoke Akintola University of Technology | Nigeria**

Bachelor of Technology (Mathematics) – April 2014

GPA: 4.4/5.0

EMPLOYMENT HISTORY

Department of Earth and Environment, Boston University | Boston, MA

Postdoctoral Research Associate (September 2020 – Present)

- Build mathematical models for wind-profile in near-wall/buildings of urban areas
- Implement algorithms to solve PDEs and ODEs
- Perform parameter-sensitivity study of turbulent flows over urban environment
- Analyze atmospheric data from climate simulations and experiments
- Create data visualizations
- Publish research results in high impact journals and present results at scientific conferences

Institute of Geophysics, University of Warsaw | Warsaw, Poland

Research Assistant (February 2017 – February 2020)

- Implement sub-grid scale model algorithm for EULAG (Large Eddy simulation) numerical code
- Perform time-series analysis on wind speed airborne measurement from POST research campaign
- Perform statistical analysis on large atmospheric datasets from DKRZ (German climate computing center)
- Publish research results in high impact journals and present results at scientific conferences
- Prepare and present quarterly scientific reports
- Organize scientific dissemination during science festivals

- Organize Physics Without Frontiers summer school in Nigeria - Sponsored by International Centre for Theoretical Physics, Italy

Fraunhofer Institute for Industrial Mathematics | Kaiserlautern, Germany

Research Assistant (April – May 2016)

- Develop algorithms to adapt FPM in-house code for biofluid applications
- Develop mathematical models for complex industrial problems
- Prepare and present weekly scientific reports

PROJECTS

- Study the dispersion of pollutants in urban environments (Ongoing)
- Formulate a robust method for quantifying the amount of turbulence in the atmosphere - Publication can be found at <https://doi.org/10.1175/JAS-D-18-0146.1>
- Developed sub-grid scale model for the numerical simulation of turbulent flows in the atmosphere. The model performs 50% faster than standard sub-grid models. Publication can be found at <https://link.springer.com/article/10.1007/s10494-019-00030-2>

PROFESSIONAL QUALIFICATION AND CERTIFICATION

- Scalable Machine Learning on Big Data using Apache Spark (April 2021)
- IBM Data science Professional Certificate (February 2021)

GRANTS

- Marie-Sklodowska-Curie Fellowship - European Union Commission (February 2017 – February 2020)

REFERENCE

Excellent references available upon request

Armand Heydarian

1111 Arlington Blvd. Arlington, VA
22209.
703-795-7354
armandheydarian@gmail.com

Capstone Project: Correctly Identifying Anti-Racist Comments from Hate Speech in Social Media using Bag of Words and BERT

Link to Code: <https://github.com/benjaminkschmidt/Hate-Speech-Detection-With-BERT>

- Analyzed a large labeled dataset regarding inflammatory language on Twitter during the recent protests surrounding the death of George Floyd.
- Tested Bag of Words model and other previously used models against newer BERT model in order to identify any possible improvement in accuracy/precision with the purpose of decreasing the high false-positive rate found in previous efforts
- Project was presented to a board for approval and report was published on AI and Ethics

EXPERIENCE

Office of Personnel Management, Washington, DC — Data Science Technical Advisor

August, 2020 – February, 2021

- Provided technical expertise for a project pertaining to language detection and the creation of natural language processing code in Python language for HR compliance.
- Wrote Python code in order to detect select words/phrases within HR trainings in order to determine compliance. Code would output a new version of training PDFs that would display the highlighted terms, along with a count of each term. Code was then tested for consistency and accuracy.
- Ran meetings between IT security team and office of the CIO in order to address concerns over possible security risks and implementation.
- Collaborated with team of designated review staff and subject matter experts in order to meet needs of staff and to streamline the process along with ensuring the efficacy of the project.

Protagonist, Washington, DC — Summer Data Science Analyst

April, 2019 – September, 2019

- Took part in daily meetings, regarding findings of data, tracking and establishment of narratives
- Created and maintained deliverables for clients based on the dashboard made.
- Created narratives for an international foundation that sought to acquire data and narratives on urban poverty and property rights in the US
- Helped create narratives for a foundation that wanted to know about tech regulation in India
- Categorized twitter, newspaper and online articles by analyzing big data and determining common narratives; meet with a team daily to discuss findings.

Ignite Group, Washington, DC — Business Analyst

May, 2016 – Nov 2018

- Authored digital content for in-bound marketing activities including white papers, infographics, and webinars and email campaigns.
- Led the development of the CareClix blog, including key materials pertaining to legislative changes in Healthcare policy and licensing which lead to an increase in leads by 25%.
- Increased leads by 25% by creating a blog that includes key materials pertaining to legislative changes in Healthcare policy and licensing.
- Developed a standardized proposal response format, including guidelines for style templates, key messaging and capability statement content.
- Pioneered the development and initial content contained in CareClix Academy, the world's first telemedicine online learning platform used by CareClix's customers to educate doctors and patients.
- Led an SEO initiative to help CareClix rank as the first telemedicine company website that appears when searching on Google.
- Created a critical budget analysis and visualization dashboard for the Washington Metropolitan Transportation Authority. This dashboard is used today by executives to analyze their budget, spend and burn rate for a variety of critical projects.
- Created CareClix's first analytics dashboard, enabling their consulting team to help clients prioritize what patients should be marketed and targeted for onboarding to a telemedicine

EDUCATION

George Washington University,
Washington DC — *Masters of Science in Data Science* Spring 2019 - Summer 2020

Virginia Commonwealth University,
Richmond VA — *Bachelor of Science in Accounting* Fall 2012 - Spring 2016

PROJECTS

Correctly Identifying Anti-Racist Comments from Hate Speech in Social Media using Bag of Words and BERT – Final Capstone Project in Python

Wine Quality Project — Analyzed Wine Quality Variables Using R

Cervical Cancer Project — Analyzed Medical Conditions and Correlation with Cervical Cancer Diagnosis Using Python

Demographic Clusters in 2016 Election — Analyzed Different Demographic Clusters in 2016 Election While Tracking Change From Previous Elections Using R

Relevant Skills

- Python
- R
- JavaScript
- C
- MongoDB

program.

- Created a proof of concept machine learning algorithm used to predict device failures and plan for preventative maintenance.

NICOLE MA

nicolema717@gmail.com | 347.925.5923 | <https://linkedin.com/in/nicole-ma/>

SUMMARY

- Extensive 3-year consulting experience with effective communications in presenting and interpreting insights from data
- Solid 3-year experience in data extraction and visualization using SQL, Tableau and Excel
- Excellent skills in data manipulation and quantitative analysis over large datasets using R, SAS and Python
- Strong statistical modeling and machine learning experience in Decision Trees, Regressions, Time Series Forecasting, etc

SKILLS

Data Management & Statistical Modeling: SQL, SAS, R, Python | **Data Visualization:** R (Shiny, ggplot2), Tableau

PROFESSIONAL EXPERIENCE AND PROJECTS

PricewaterhouseCoopers LLP

Washington, DC

Credit Risk Modeling Senior Associate (Data Science & Analytics)

May 2020 – Present

- Built dynamic and interactive dashboards in Tableau and Excel to perform various model back-testings under different economic forecasting scenarios and visualize results, which largely increased the model ongoing performance monitoring efficiency and accelerated model validation process under tight timeline
- Developed complex loan-level Credit Risk Models in SAS and R for multiple clients to predict the defaults (PD), exposure-at-default (EAD) and recoveries (LGD) for various portfolios
- Lead analysis on multiple financial product portfolios across pre and ongoing COVID periods to develop insights on product trends, reassess business performances and design remediation modeling strategies to incorporate COVID impact
- Performed model reviews and independent testings for statistical models and implementation framework, documented validation reports for major US banks and Credit Card institutions, converted SAS based statistical models into Python
- Communicated and collaborated with multiple team members and stakeholders to design and organize roundtables on various financial analytics topics for mid-sized financial institution clients
- Lead a team of 5 to design and test automated data cleaning and processing pipelines in SAS and Python, largely increased modeling data processing and creation efficiency

Credit Risk Modeling Analytics Associate (Data Science & Analytics)

July 2018 – May 2020

- Built Extract-Transform-Load (ETL) data process, analyzed large sets of credit cards payment data (over 300GB), developed complex loan level quantitative models on over 10 international unsecured portfolios for major banks, which helped forecast and prepare for over \$500M loan loss reserves
- Applied classification models (Logistic Regression, Decision Tree, etc.) and regression models in SAS and Python to predict probability of defaults, gross credit loss as well as identify key contributing attributes to account status and risk level on various portfolios for financial institutions, which increased model accuracy and execution efficiency
- Collaborated with the Clients' Modeling team to conduct exploratory analysis in SAS and Python on over 300M records of credit card data to identify data issues, validate data quality and profile data features, performed regular ad-hoc data query and analysis in SQL to understand clients' data of different product types, payment hierarchies, local business strategies, etc

Willard Bishop (Inmar)

Winston-Salem, NC

Analytics Consultant

October 2017-May 2018

- Collaborated with the data analytics team to develop a new framework in identifying a representative portfolio of Personal Known-Value-Items (PKVI) to help modify retailers' pricing strategy and attract more loyal customers
- Built Extract-Transform-Load (ETL) data process, scrubbed and analyzed over 1.8M rows of store-based Transaction Log (TLOG) data from a large grocery retailer
- Built predictive models in R to analyze and interpret customer purchase behavior by using linear regression, logistic regression and cluster analysis

Lowes Food Project Data Management and Predictive Analysis

September 2017

- Applied SQL and Entity-Relationship Diagrams to create standardize tables for 5MM records of massive transaction data
- Discovered seasonality trends of frozen products in NC retail stores using Time Series Analysis which successfully helped Lowes to introduce the newest frozen pizza product in right time

EDUCATION

Wake Forest University

Winston-Salem, NC

Master of Science in Business Analytics

May 2018

Relevant Coursework: Data Management, Data Mining, Marketing Analytics, Predictive Analytics and Forecasting

Webster University

Saint Louis, MO

Bachelor of Art in Economics (Math Track), Double Major in English Translation / Summa Cum Laude

May 2017

ACTIVITIES AND MEMBERSHIPS

Big Data and Analytics Association, Webster University Vice President, Co-founder

Saint Louis, MO

Mursaleen Shiraj

ECONOMIST · ECONOMETRICIAN · DATA SCIENTIST

101 Hulbert Hall, 2020 Wilson Road, Pullman, WA 99164

☎ +1 309-825-4483 | ✉ mursaleenshiraj@gmail.com | 🏠 sites.google.com/view/mursaleenshiraj | 📱 [mursaleenshiraj](#)

Work Experience

Washington State University

Pullman, WA

ECONOMICS RESEARCHER, PH.D. CANDIDATE

2016 - Present

- Modeled and estimated causal impact of short-term rental regulation on housing price using data from inside Airbnb, American Community Survey, Google trends, Zillow etc.
- Modeled and estimated the impact of COVID 19 on food security using data from Household Pulse Survey (Census Bureau), Google mobility reports etc.
- Conducted exploratory data analysis that motivates the research in housing price growth model.
- Conducted exploratory data analysis that motivates the research on food security
- Generated insightful summary and plots from multiple unstructured patient level data from regional hospital.

JP Morgan Chase & Co.

Columbus, OH

DATA SCIENCE INTERN

2019

- Predicted deposit portfolios using advanced regression methods on account level data. Improved out-of-sample forecast error by \$390 million.
- Modified existing deposit forecasting model to attain improved fit.
- Collaborated with cross-functional team to incorporate business decision in models.
- Generated insights based on exploratory data analytics.

Northwestern Mutual

Normal, IL

INTERN

2015

- New client acquisition, sales call and customer relationship management.

BRAC BANK Limited

Dhaka, Bangladesh

ASSOCIATE MANAGER, CORPORATE CREDIT, CREDIT RISK MANAGEMENT (CRM)

2013 - 2014

- Conducted financial statement analysis of large corporations for credit need assessments, risk assessments, and risk grading.

ASSOCIATE MANAGER, CARDS CREDIT, CREDIT RISK MANAGEMENT (CRM)

2010 - 2013

- Led a team of 17 credit underwriters across two locations processing credit card applications for credit approval.
- Conducted credit card portfolio analysis on customer level data to identify risky customer segments, leading to growth oriented sales efforts on high yielding customer segments and reduction of credit card Portfolio at Risk (PaR) by 12%.
- Prepared operational risk indicator report based on identification of key operational risk indicators.

TEAM MEMBER, RETAIL BANKING RESTRUCTURING PROJECT

2011

- Conducted customer segmentation for the deposit portfolio based on account level data.
- Developed questionnaire and coordinated survey through distribution channels.

MANAGEMENT TRAINEE OFFICER (MTO)

2009 - 2010

- Prepared reports to improve operational efficiency, product review, customer satisfaction, business development, sales performance etc. during year-long attachment across all departments as part of the leadership development program.

Centre for Policy Dialogue

Dhaka, Bangladesh

RESEARCH INTERN

2008

- Designed survey questionnaire and coordinated survey for preparing the Global Competitiveness Report (GCR), 2008.

Skills

Data Analysis & Modeling

Causal inference, IV-regression, discrete choice analysis, machine learning, forecasting, exploratory data analysis.

Programming and Analytics

Python, R, Tableau, Stata, SQL, Excel, \LaTeX

Education

Washington State University

Pullman, WA

PH.D. ECONOMICS

2016 - 2021

Illinois State University

Normal, IL

M.Sc. APPLIED ECONOMICS

2014 - 2016

Institute of Business Administration, University of Dhaka

Dhaka, Bangladesh

M.B.A. FINANCE

2009 - 2013

JUE WANG

wangjue1992@gmail.com | 631-933-3015 | <https://www.linkedin.com/in/jwang212>

SKILLS

Programming:

- Python
- R
- SQL
- VBA

Analytics Tools:

- Bloomberg
- SAS
- MATLAB
- MS Office Suite

Professional skills:

- Risk management
- Derivative Pricing
- Quantitative Analysis
- Regulatory report

Languages:

- Russian (Entry Level)
- English (Professional)
- Mandarin: (Native)

EXPERIENCE

Axiom Software Laboratory

New York, NY

Tech Lead Consultant of MUFG Project

Oct.2020 – Present

- Supervisor of 3 people Professional Service squad for MUFG(client) project implementation

Strategic Developer,

Feb.2019 – Oct.2020

- Leader and Owner, Design and Developed following product based on Oracle environment:
 - SEA Rule 15c3-3 Customer Protection – Reserves And Custody Of Securities(Signed with client)
 - SEA Rule 15c3-1 Appendix B, Adjustments to Net Worth &Aggregate Indebtedness for Commodities Transactions
 - FINRA 4210 Margin Requirements
- Primary Owner, Taking full charge of maintenance and technical support for following products:
 - U.S. Qualified Financial Contract (QFC) Project
 - Current Expected Credit Losses (CECL) Project
 - SEA Rule 15c3-1 ‘Securities Borrowing and Lending’ & ‘Repo/Reverse Repo’ haircuts calculation
- Responsible for ‘Broker-Dealer Net Cap’ product release for Cloud and PostgreSQL Server clients

Application Developer,

Nov.2017 – Feb.2019

- Create, restructure and implement POC and Demo products for signed clients and potential clients
- Configure dashboard project pages, visualized Data Lineage and Sign-Off Status from local DB to cloud platform
- Developed multiple functions and tools for internal use based on Python, R, Axiom Scrip Language and OS commend
- Cooperate with Subject Matter Experts, deliver solution for JIRA tickets from Professional Service group or Clients

Ontic Capital Partners, LP

New York, NY

Quantitative Developer,

May.2017 – Aug.2017

- Developed Python tools to crawl and parse 10Q XBRL data for over 4.5k stocks from SEC-EDGAR
- Developed SQL based solutions to format over 6.6 million rows of XBRL data for statistical analysis
- Used fuzzy-logic, regular expression and statistical methods selected 98 accounting variables to analyze
- Used R-based Machine Learning tools to develop equity pricing models and trading strategies with Senior Quant

Portfolio Analyst,

Aug.2017 – Oct.2017

- Applied multiple portfolio optimization methods to cryptocurrency and pink-sheet stock portfolio by python.
- Designed and developed daily based back-test python script, with statistic and risk management indicators, to compare the portfolio performance with different strategies and make connection with previous research outcome.

Fordham University

New York, NY

AlixPartners Analyst summer Intern,

Jun.2016 – Oct.2017

- Partnered with New York and Chicago based Associates to retrieve and scrub financial data from Capital IQ, I/B/E/S
- Measured enterprise value for firms filed Chapter 11 bankruptcy by four cash-flow based insolvency models by Stata
- Constructed and Validated multiple insolvency regression models by and select optimal values for 3 multiples (EV/R, EV/EBIT, EV/EBITDA), reducing estimation standard errors by 57%

Research Assistant,

Oct.2016 – May.2017

- Participated in multiple academic research projects incorporating data analysis and automation programming
- Used R to Simulate probability density estimates of equity values to generate a trading probability signal
- Developed a Python based spider to crawl over 100GB financial reports from SEC-EDGAR for textual analysis
- Held weekly QA sessions and graded homework for Risk Management and Computational Finance courses

EDUCATION

Fordham University, Gabelli School of Business, New York, NY

Aug.2015 – May.2017

- Master of Science, Quantitative Finance

Beijing University of Aeronautics and Astronautics, Beijing, China

Aug.2011 – July.2015

- Bachelor of Science, Financial Engineering
- Bachelor of Science, Mathematics and System Science

XIAOLUN(JAMES) LI, CFA, FRM

Charlotte, NC 28202

Tel: 732-983-6980 | Email: james31.lxl@gmail.com

SUMMARY

Self-motivated and detail oriented quantitative financial analytic professional with 4+ years quantitative analysis in banking industry. Proficient in Python, VBA, SQL, R. CFA charterholder, FRM Certified. Deep interest in applying quantitative analysis and product knowledge to financial modeling

WORK EXPERIENCE

Truist/BB&T Corp, Charlotte/Winston Salem, NC

Quantitative Analyst, MSR hedging analytics, Funds Management *Apr 2017-Present*

- P&L explanation: risk exposures calculation and daily P&L attribution for MSR hedging program using Fincad and PolyPaths
- VaR: VaR calculation and backtesting using historical simulation for MSR hedging program:
- Vendor models: maintaining and enhancing vendor models (PolyPaths, Fincad, Finastra Summit, YieldBook) for fixed income analytics: swaps, swaptions, eurodollar futures
- Scenario analysis: Lead the project of end to end design and implementation of MSR hedging analysis for CCAR/business line forecast purpose with Polypaths, batch script, Python based on Key Rate DV01, and Vega, and document via LaTeX
- Process development: 1) automating reporting process by VBA, Python and SAS programming, 2) checking new hedges based on email via Python and web scraping (selenium) 3) repository management in Git
- Data Manipulation: conducted complex database query via SQL Server

Wells Fargo & Company, Charlotte, NC *Jul 2016-Mar 2017*

Quantitative Analytics Consultant, Market Risk Analytics Team

- Sensitivity analytics for Wells Fargo's book (CDS, bond products, equity products) specific risk model on various risk parameters (Gamma distribution, Idiosyncratic Volatility, notional, correlations etc) and improved process efficiency with automation process
- Model research and improvement for VaR on capital markets instruments (Fixed Income, FX, Equities and Commodities asset)
- Improved process efficiency for various risk reports by VBA programming on daily basis, designed reusable classes and functions to shorten 80% of report processing time.
- Developed and maintained SQL queries and stored procedures to conduct complex data mining tasks interfacing with Microsoft SQL Server on daily basis
- Evaluate the effect of commodity proxy driver by regression analysis(Matlab)

EDUCATION

Rutgers University, the State University of New Jersey, New Brunswick, NJ

Master of Science in Mathematical Finance, *May 2016, GPA: 3.7*

Shandong University, Jinan, China

Bachelor of Science in Financial Engineering, *June 2013, GPA: 3.7*

CFA Charterholder

FRM Certified

Deep Learning Specialization

Other PROJECT EXPERIENCE

Machine Learning in Python (classification)

- Extracted features, Implemented logistic regression with L2 regularization and predicted sentiments for Amazon product reviews using Pandas and SciKit-Learn
- Implemented statistical models, such as AdaBoost Algorithms, to identify the risk factors in loan applications
- Implemented Logistic Regression with Stochastic Gradient Ascent to speed up coefficients calculation

Option Pricing and Hedging using Java

- Implemented various random number generators (inverse transform method, acceptance-rejection method) using Java
- Monte Carlo Simulation: Option pricing (Vanilla Options, Barrier Options, Asian Options), Greeks calculation, reduce variance significantly by using Variance Reduction techniques (Antithetic Variates, Control Variates, Stratified Sampling) and conduct convergence analysis

Vivek Ashodha

Senior Data engineer offering more than 15 years of experience in demanding environments focused on producing cutting-edge systems. Well-organized, customer-focused and a team leader with a history of proposing enhancements that improve designs.

Work History

2019-10 -
Current

Sr. Data Engineer

CapitalOne, Mclean, VA

- Design and build numerous fraud defence Microservices with automated testing and github integration using Node.js, Vue.js, Kafka, DynamoDB, Splunk, Java, Python, Spark2.4, Spark Streaming, EMR. Hadoop.
- Work with product owners and enterprise architects to evaluate design options to present to the teams.
- Build POCs for new architectural patterns and present it to a wider audience across teams.
- Build Python-based SDK for onboarding multiple kafka topics quickly without further development effort.
- Build CI/CD pipelines, using in house devOps tools and Jenkins.
- Build Java Spring-based Kafka consumer –producer .
- Build Numerous node.js APIs for telephonic agent user apps.
- Build UI components for Agent servicing platform in VUE.js

2013-10 –
2019-10

Sr Software Developer

CGI, FannieMae, Herndon, VA

- Migrate Existing Abinitio Projects to Spark on AWS.
- Design and build aws job orchestration for ERM applications on AWS cloud platform.
- Perform release manager role to create build scripts and implement CI/CD process using aws code commit , code build and code pipelines.
- Design and Build continuous running jobs to migrate existing historic onprem data to cloud.
- Perform Proof of concept solutions (POC) in apache Spark , Talend 6.0 for verifying feasibility and timeline estimation.

Personal Info

Address

Ashburn, VA, 20147

Phone

571-488-7637

E-mail

vivek.ashodha@gmail.com

Skills

ETL Tools:

Abinitio 3.x, Talend 6.x,
BigData Tools: Apache Spark 2.3
, Spark sql, pyspark, zeppelin,
DynamoDB

Cloud technologies: Amazon
AWS (Lambdas, DynamoDB,
EC2, step
Functions,SQS,SNS,S3,Batch,
Glue, Code commit and code
pipelines), docker

DataBases:

Oracle, Teradata, Netezza,
RedShift , HIVE, DynamoDB.

Programming Languages: Java
1.8, Scala, python 3, Node.js,
vue.js, mocha, groovy. Java
springboot,

Scripting: KSH, BASH, SQL ,
PL/SQL

Others:

CI/CD, Data analysis, Data
Warehouse

- Support existing Data warehouses and multiple JEE applications, perform enhancements, defect fixes and establish root cause analysis.
- Analyze Existing applications and target state data models and identify gaps and escalate issues to appropriate teams.
- Mentor Junior resources in business and technical areas.

**2010-05 -
2013-10**

ETL Developer Level III

CapitalOne, Richmond, VA

- Build Abinitio Data pipelines to populate PMORE and Mortgage Data Warehouse.
- Establish detailed program specifications through discussions with clients.
- Generate and implement possible solutions to predicted problems.
- Provide critical recommendations to senior management on performance improvements.
- Perform data analysis for ETL applications.
- Create High level and low level design documents with end to end data flow and transformations for business rules.
- Establish Data Sourcing, Data processing and Data loading strategies for heterogeneous sources.
- Perform application support and production tickets and issue resolutions.

**2005-10 -
2010-06**

Software Engineer

Syntel Inc, Phoenix, AZ

- Handled on-site coordination, project planning, monitoring, controlling, and project lead activities.
- Establish detailed program specifications through discussions with clients. Oversee data analysis GCST Card & Travel application and offered application support and production tickets and issue resolutions.
- Plan and execute business development for venture funding of financial products.
- Guaranteed smooth running of business product/applications; troubleshoot technical issues and concerns from every client.
- Adhered to quality assurance standards to surpass customer expectations.
- Acted as liaison with other departments with regards to technical issues and disputes.

- Administered client interfacing, SDLC, and maintenance for Abinitio product development; handled project planning, system integration, UAT, implementation for South-east Asia Regional project and provided product enhanced functionality and design reviews.
- Lead offshore development team and drive core technical analysis for various initiatives.

2003-01 -
2004-10

System Analyst

Avanade, Reston, Va

- Build Election ballot Management Java Applications using Java RPC, Java Servlets, EJB's.

2002-04 -
2003-01

System Analyst

Destiny Management Services, Silver Spring, MD

- Build Payment Management software system using Java 1.2, Servlets.

Education

2003-01

M.S: computer Science

Cloudera Certified Developer for Apache Hadoop (CCDH).

Certified R Programmer.

AWS Solution Architect Associate.

Data Analyst

Detail-oriented professional with in-depth knowledge and hands-on experience in data analysis and visualization. Skilled in scripting languages such as Python and R. Experienced with probability modeling and deep learning accomplishing several programs. Self-directed, flexible, team-oriented, and quick learner with excellent communication and leadership skills.

Technical Proficiencies

Programming Languages:	Python, R, SQL, C++, Apache Spark, Shell
Software:	Tableau, Stata, Matlab, Microsoft Office
Cloud Computing:	AWS
Languages:	Mandarin (native), English (fluent), Japanese (intermediate)

Education

Master of Science in Data Science and Analytics

Georgetown University, Aug 2019 – Dec 2020

Key Modules: Python, R, Natural Language Processing, Probability Modeling, Data Visualization, Deep Learning

Bachelor of Science in Mathematics

University of Michigan, Aug 2016 – Apr 2018

Key Modules: Data Structures and Algorithms (with C++), Probability, Database Management, Economics, Econometrics

Illinois Institute of Technology, Aug 2014 – May 2016

Key Modules: Object-Oriented Programming (with Java), Linear Algebra, Mathematical Modeling, Discrete Math

Experience Highlights

Georgetown University, Washington, DC

2019 – 2020

Major: Data Science and Analytics

Developed strong foundation of statistics and data science. Built an in-depth understanding of data cleaning, data analytics, probability modeling, as well as data visualizations. Gained programming expertise specifically in Python and R.

- Accomplished a project that utilized data scraped from Yelp and TicketMaster to analyze internal and external factors that affect the rating of a restaurant.
- Build models with Recurrent Neural Nets and XGBoost to predict stock prices using data from Deutsche Borse PDS's S3 bucket.
- Completed a project that uses Convolutional Neural Networks to identify the type of Pokemon given their images and uses Generative Adversarial Networks to generate new Pokemon images.

China Everbright Bank, Beijing, China

Summer 2017

Intern (Department of Information Technology)

Collected and reported monthly transaction data and developed alternative data clustering method by utilizing industry-standard solutions, such as Hadoop and Apache Spark. Effectively led Data Warehouse operations to streamline operations.

- Assisted team with big data projects by building and running tests for the anti-fraud module of big data platform. Supported in the design of statistical model for credit card users' behavior based on geographic location.
- Distinguished for developing data clustering method on customers' data to promote finance products.
- Recognized for efficiently utilizing Hadoop and Apache Spark to collect and report monthly transaction data.

Illinois Institute of Technology, Chicago, IL

Aug 2015 – May 2016

Teaching Assistant

Served as Teaching Assistant for course CS104 (Introduction to Programming with MATLAB). Collaborated with students in discussion sections on a weekly basis, and assisted with lab projects, concurrently graded students' assignments. Resolved queries and answers to questions regarding course material.

David Nguyen

Technology Engineering Analyst

Recently graduated student with experience in data analytic and proven ability to drive process efficiency and data integrity. Looking further to advance my skills in identifying business needs and developing valuable solutions to drive business accuracy and effectiveness.

Work History

2020-07 - Current	Application Developer <i>Accenture Federal Services</i> <i>Project: Avenue - United States Postal Services (2020-08 – Current)</i> <ul style="list-style-type: none">Develop knowledge of application, business, and technical requirements.Assist in technical design based on requirements.Build and unit test components.Tier 2 Production Support: Analyze data and report results; Research and resolve production issues.Develop technical skill set in PL/SQL.Work with big data using Oracle database.
2018-06 - 2019-12	Data Analyst <i>SES Satellites</i> <ul style="list-style-type: none">Assisting business analysis team in generating monthly reports on the performance of the NOC operation using Power BI tool.Assisting the Customer Service Managers in doing a deep dive analysis on certain data issues as requested.Working directly with the Customer Service Managers without supervision in generating and modifying Monthly Service Report for more than 170 clients.Significantly reduce the Monthly Service Report production time from 14 days down to 5 days.Proactively maintaining the integrity of data in Salesforce and providing ad hoc reports as requested.Analyzing data quality reports on a recurring basis and working with business data stewards to correct data issues.
2019-09 - 2020-05	Senior Design Project <i>George Mason University, Virginia</i> <ul style="list-style-type: none">Analyzing client yacht club's historical incomes and expenses data.Developing a cash flow forecasting model software for a client's yacht club to help the club leadership make planning decisions.Developing a capital investment plan that maximizes the utility of investments made while taking financial resource constraints into account.Awarded best paper in decision support systems track for 2020 Andrew P Sage Capstone Design Competition

Education

2020-08 - Current	Master of Science: Data Analytic Engineering <i>George Mason University - Fairfax, VA</i> <ul style="list-style-type: none">Concentration in Predictive Analytics.Coursework in Applied Predictive Analytics, Stochastic Operation Research and Practical Optimization.
2016-08 - 2020-05	Bachelor of Science: Systems Engineering <i>George Mason University - Fairfax, VA</i> <ul style="list-style-type: none">Concentration in Data AnalyticsGraduated with 3.43 GPA

Certifications

2018	Certified Yellow Belt Six Sigma
2020	ICAgile Certified Professional

Contact

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Phone
(703) 687-7939
E-mail
hnguye82@masonlive.gmu.edu

Skills

Problem Solving	<div><div></div><div></div><div></div><div></div><div></div></div>
Data quality assurance processes	<div><div></div><div></div><div></div><div></div><div></div></div>
Data Analysis	<div><div></div><div></div><div></div><div></div><div></div></div>
Data formatting and validating	<div><div></div><div></div><div></div><div></div><div></div></div>
Predictive modeling	<div><div></div><div></div><div></div><div></div><div></div></div>
Statistical analysis	<div><div></div><div></div><div></div><div></div><div></div></div>
Project Management	<div><div></div><div></div><div></div><div></div><div></div></div>

Software

Python	<div><div></div><div></div><div></div><div></div><div></div></div>
SQL	<div><div></div><div></div><div></div><div></div><div></div></div>
Microsoft Power BI	<div><div></div><div></div><div></div><div></div><div></div></div>
Salesforce	<div><div></div><div></div><div></div><div></div><div></div></div>
R	<div><div></div><div></div><div></div><div></div><div></div></div>
Oracle Database	<div><div></div><div></div><div></div><div></div><div></div></div>

Languages

Vietnamese	<div><div></div><div></div><div></div><div></div><div></div></div>
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Mary Phythian

Glen Allen, Virginia

804-502-9411 • Mary.Phythian@comcast.net • [LinkedIn](#)

SAS Programmer and Analyst

Demonstrated excellence in SAS programming, coding, and platform administration.

Expertise in SAS-driven solutions as a leader and collaborator in Information Technology and data analytics. Talented coder and programmer with an eye for detail and accuracy to create streamlined and error-free processes. Adept at SAS development, from project ideation to requirements, testing, deployment, and follow-up support.

*SAS Platforms / Project Support and Leadership / Technical Troubleshooting
Coding and Programming / Testing / Deployment / Strategic Planning*

TECHNICAL PROFICIENCIES

Platforms: Windows, Red Hat Enterprise Linux and Veritas.

Tools/Software: SAS, SAP WEBI, Hadoop, HSQL, SQL, Trifacta, Tableau, MicroStrategy, Putty, Splunk, WinSCP, QlikView, Qlik Sense, Microsoft Access, Microsoft Excel, ASP and Java.

Hardware: SPDS

PROFESSIONAL EXPERIENCE

Data Engineer (12/2019 - Present)

Truist Bank (Richmond, VA)

Design and code applications in an Agile environment. SAS contact to assist in the migration to move to the new Truist SAS grid and support my teammates with any SAS issues they encounter during the SunTrust/BB&T merger. Collaborate with teammates to offer training and mentoring. Developed a Qlik Sense application for the Government Contracts group.

Business Solutions Analyst (06/2015 – 12/2019)

SunTrust Bank (Richmond, VA)

Drove all aspects of SAS programming, coding, and support as a key leader and expert in SAS solutions. Collaborated with technical and cross-functional teams, partnered with senior leaders to devise automation solutions, and coordinated with cross-functional teams in all aspects of user training and support. Continuously improved and refined processes leveraging automation technologies. Responded to data pull requests, reengineered MS Access reports in SAS, produced reports on the Data Lake using Hadoop and Hive SQL, and oversaw the team's SAS environment.

Key Achievements:

- Championed over \$460k in Dealer Group savings through strategic process improvements via SAP Webi reports for in-house reporting throughout the DataScan upgrade.
- Created a quality control project to monitor and track documents for commercial loans replacing a manual process which saved over 10 hours of manpower a week.
- Developed a process to track SAS grid usage, reducing production problems related to grid space issues.

...Continued...

Mary Phythian

Page Two

SAS Administrator (10/2013– 06/2015)

SunTrust Bank (Richmond, VA)

Managed the SunTrust SAS platform, including incident management and reporting, programming, and user support across the organization. Established a reputation for excellence in UNIX scripting commands, resolving incidents quickly to ensure a stable environment, and driving reliable platforms.

Key Achievement:

- Demonstrated success supporting over 400 SAS users, including comprehensive coding support, training, mentoring and best practices coaching.

SAS Programmer/Credit Risk Team Leader (10/2009 – 10/2013)

SunTrust Bank (Richmond, VA)

Excelled in a dual role in charge of developing and deploying SAS initiatives in partnership with subject matter experts and technical teams. Strategically planned and determined data needs and systems requirements, with all areas of mortgage default including credit risk. Coordinated with vendors in data implementation and delivery, and leveraged SQL tables for monitoring and reporting of call data effectiveness. Assisted in the development of HAMP Loan Modification SAS code and responded to requests for SAS data needs through ad-hoc reporting and the elimination of manual processes where appropriate.

Key Achievements:

- Created an automated weekly SAS program to retrieve the latest mortgage rates from the Freddie Mac PMMS site to update the HAMP Datamart, replacing a manual process and saving the business time.
- Partnered with Client Experience and Mortgage Default to develop an automated process in SAS to reach and interact with Loss Mitigation clients through a third-party vendor. The successful project led to a significant reduction in complaints and an increase in overall satisfaction due to clients being better informed.

Senior Analyst/SAS Programmer (03/2008 – 05/2009)

Circuit City Stores, Inc. (Richmond, VA)

Provided analytical support for the testing and segmentation efforts of the retention marketing program using customer profiling through SAS data manipulation on PC and UNIX platforms. Fulfilled internal regular and ad hoc reporting needs for executive and team associates, contributing to an email program that delivered 35% visits growth (80MM in 2008), 69% sales growth (\$180MM in 2008), and 15% revenue per email growth, while operating with a \$3.0MM budget. Worked cross-functionally across varying departments on collaborative marketing campaigns, strategic analytics and segmentation projects.

Additional Experience:

SAS Programmer/Analyst – Capital One Financial Services (03/2006 – 03/2008)

Automatic Data Telecommunications Center Operator – United States Army

EDUCATION AND TRAINING

Post-Baccalaureate Certificate in Information Systems

Bachelor of Science in Social Work

Virginia Commonwealth University, Richmond, Virginia

Shaurya Patel

E: patelshaurya14@gmail.com • M: 630-723-1084 • St. Louis, MO 63104

RISK MANAGEMENT & FINANCIAL TECHNOLOGY

Career Objective: I am an ambitious analyst looking to shape a career in the risk management & financial technology field while pursuing hands-on and managerial experience, where I can work independently, or as a member of a team to meet my own potential and realize where and how to further develop myself in my field and as an individual.

Personal Skills: Possessing a high level of interpersonal skills to increase the quality and quantity of communication, as well and can apply a mixture of proven theories and newer levels of expertise in areas which may otherwise be inefficient, and thrives in a fast-paced setting. I am accepting of constructive criticism and willing to learn and adapt myself to the situations at hand.

EDUCATION

MS(c) in Applied Financial Economics, Anticipated Completion December 2021

SAINT LOUIS UNIVERSITY • St. Louis, MO

Relevant Coursework includes:

Finance & Microeconomic Theory • Securities & Derivatives • Fixed Income • Financial Optimization • Applied Financial Optimization Methods • Private Equity • Econometrics • Forecasting Financial Variables

BS in Business Administration in *Information Technology Management*, May 2017

SAINT LOUIS UNIVERSITY • St. Louis, MO

Relevant Coursework includes:

Systems Analysis & Design • Enterprise Systems • Finance • Oracle Database • AngularJS • Project Management • SQL/PLSQL • Data Mining • Big Data Relational Database Management • Spreadsheet Analysis • Forecasting

TECHNICAL SKILLS

SQL Server • Visual Studio • Microsoft Office Suite: advanced Excel & Visio • Database Software • JAVA • HTML • R • Progress 4GL • SPSS

Native proficiency in English, Hindi, and Gujarati. Professional working proficiency in Spanish.

EXPERIENCE

Market Risk – Financial Tech Systems Consultant, Corporate Markets & Institutional Risk Wells Fargo (September 2017 – Present)

Wells Fargo Home Lending performs trading with mortgage-backed securities, which are sold to different private groups at high volumes. The line-of-business for which I work provides as secondary line of defense to provide the MBS traders at WFHL data security and management while the data is migrated and aligned to better serve the purpose of those who trade on behalf of the company. The reports are used to determine and separate risk management throughout the MBS trading experience for the largest on-hand trade desk in the country.

- Outlining Financial Greeks (DV01, Convexity, Vega, as well as Attributions and Value-at-Risk analysis) and decomposing them to create structured middle-level variables to host metrics for functionality
- Providing query support to risk partners for analysis and report-based utility, in assurance with Compliance & Governance of second layer of Market Risk Oversight
- Initiating the core calculations and data warehousing of the Market Risk Oversight Report. Stripping the back-end of the report and refunctioning the database views, tables, triggers, etc.
- Modeling the individual load management system for 7+ external feeds for an in-house warehouse to manage and produce reporting.
- Led the creation of a multitude of documents and user manuals which outline specifications and requirements of the code, while understanding both the technical and functional aspects through which to bridge communication and provide clarity.
- Assisting on a wide variety of layers of the business evolution project. Working with higher management to effectively formulate, modify, and understand the requirements.
- Performing data mining and database management from day-to-day, week-to-day, quarter-to-day and incorporating Market Risk management reports.

ERP Design Apprentice, Info ComTech, Inc. (December 2016 – February 2017)

Info ComTech, Inc. is a consulting firm for Oracle, database, and ERP focused third-party clients. We designed and modulated the different nuances of Database Relational Management Systems and QAD MFG/PRO eB2 Enterprise Resource Planning software, and Oracle, where I was specifically in the Order Management module and Analytics. My responsibility was to provide our clients with market-standard web applications and system designs/implementation as well as managing the systems until upgrades were needed and providing code development using Progress 4GL.

- Engaged on Progress 4GL Development Services in relation to MFG/PRO, and analysis of System Requirement Specification (SRS) documentation which required process mapping of the system before creating relational coding for each sector of the overall documentation chain.
 - Led database migration testing in test environments which helped ensure the definitiveness of our ability to implement for our client. Was responsible for isolation management of specific aspects while migration testing was in progress.
 - Using PL/SQL to effectively use the Oracle Database for detailed data retrieval and Ad-Hoc Reports.
 - Combined Progress 4GL with relational databases to allow for Rapid Application Development, by gathering customer requirements, before early testing of the components before increasing the load but receiving rapid output through parallel development of testing and application.
 - Delivered the program development and RDBMS coding, performing unit testing, and creating test documents with EZForm while outputting progress reports.
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PROJECTS & CERTIFICATES

Washington University in Saint Louis, Data Analytics Boot Camp (June 2018-December 2018)

The method behind extraction and creating and making sense of data. Utilizes programs ranging from Excel, SQL Server, and Tableau while mining Data to show the best use of real world analytics and decision-making through these motions.

SAP Certificate by SAP America, Inc. (May 2017)

For satisfactory completion over 6 courses in a program of study supported by SAP Business Suite, as offered at Saint Louis University.

Stephanie M. Harrington

sharrington242@gmail.com

(949) 257 – 5105

EDUCATION

Purdue University, West Lafayette

Master of Science: Statistics (Applied Statistics)

Expected May 2021

University of California – Irvine

Bachelor of Arts: Quantitative Economics

Minor: Statistics

March 2017

SKILLS

- Statistical programming languages and tools: R, Python, MATLAB, SQL, SAS, Jupyter notebook, Git/GitLab
- Operating environments: Linux/Unix (GNU Emacs) and Windows (proficient in MS Office)
- Good verbal and written communication skills, highly organized, and strong attention to detail
- Ability to work both independently and collaboratively as part of a team
- Languages: English (native), proficient in Spanish and Japanese

RELEVANT WORK EXPERIENCE

The Hartford

Data Science Intern

June 2020 – August 2020

- Used lasso regression, elastic net regression, and random forest to build a property peril sub-model for suite of pricing models to produce a risk score based on water non-weather loss cost. Created risk score using training set predictions from sub-model to use as a predictor in the current building frequency (BLF) model to determine an improvement in the predictive power of the current BLF model
- Built REST API using R to parse input selections from HTTP requests, select appropriate model objects, calculate reserve ranges based on user inputs, and return results to client in JSON format for different catastrophe types

Federal Reserve Board of Governors

Senior Research Assistant

July 2017 – July 2019

Washington, DC

- Applied machine learning model (ridge) to estimate forecast combination weights to determine the set of forecasts to combine and determine if regularization is desirable. Implemented in Python by regressing realized GDP on the predicted GDP per individual forecaster and compared ridge regression performance to simple average regression
- Used object-oriented programming in Python to calculate the cumulative density function of predicted probabilities, visually represent the time series of the CDF and visually show where the realized value would fall given the probability mass function (PMF) from survey data
- Built an out-of-sampling forecast algorithm in R to predict relative prices in the Eurozone area and computed the root mean squared prediction error to assess predictive performance
- Applied principal component analysis (PCA) on time series data in Python and data analysis on the relationship between unpredictable changes in the interest rate and economic indicators. Data analysis included analyzing preliminary regression model results and calculating measure of central tendency over time
- Did multinomial logistic regression to analyze the estimated odds of a firm revising their forecasts up or down dependent upon changes to the interest rate
- Ran and analyzed linear regression of exchange rate expectations of seven countries to determine if a change in the current spot rate induces a revision in the predicted future level of the spot rate
- Ran and analyzed linear regression on relative prices compared to Germany in the Eurozone area and data analysis on each country's effect on prices five years out
- Data analysis on determining the best forecaster of 30 firms on various exchange rates by analyzing root mean squared prediction error of each firm over a specified time period
- Data manipulation on large datasets in R and Python to prepare for statistical analysis and modeling
- Transformation of unstructured data of 312 text files into structured datasets using OCR and utilized Python and R to create multiple functions to clean and parse datasets into 312 csv files to produce an original longitudinal dataset consisting of approximately 250,000 data points from 20 years of data
- Programmed an interactive and automated RShiny application that allows users to specify different parameters of four monetary policy models. Utilized a cronfile to automate the application at a daily frequency and pull real-time data from necessary databases
- Made two R packages: (1) for monetary policy models (20 functions); (2) for analyzing exchange rate data
- Data aggregation in R on exchange rate expectations aggregating on firm and year to obtain descriptive statistics from Blue Chip Financial Forecast survey data
- Build attractive data visualizations in R and matplotlib library from Python for the purpose of displaying different analytics, visually representing validations and convey the importance of the work done

Office of the Comptroller of the Currency

June 2016 – September 2016

Economics Research Intern**Washington, DC**

- Utilized MATLAB to implement and test code for computing impulse response functions (IRF) of credit spread to interest rate and GDP growth, and IRF of large bank default rates to real GDP and credit spread
- Used vector autoregression (VAR) to create graphs of the IRF, compare and compile results
- Collected and located auditor names and auditor opinion of financial statements and internal control using the U.S. Securities and Exchange Commission EDGAR database

Networks, Computation, and Social Dynamics Lab (NCASD)**January 2016 – June 2017****Undergraduate Research Assistant****Irvine, CA**

- Data analysis on network structure and created data visualizations on mean degree and internal/external ties between individuals
- Developed code in R that computed the expected number of ties between individuals in an area to be available as covariates to examine the relationship of large-scale network structure to other social phenomena
- Cleaned and manipulated large geospatial data sets consisting of 100,000 observations from the U.S. 2010 Census in R

University of California – Irvine (Dept. of Economics)**Feb. 2015 – June 2015 / Jan. 2016 – June 2016****Student Researcher****Irvine, CA**

- Utilized Excel for collecting, organizing, and populating data on U.S. labor discrimination for research project and provided research support to graduate students and professor

OTHER EXPERIENCE

Center for Integrated Systems in Aerospace (CISA)**November 2019 – Present****Graduate Research Assistant****West Lafayette, IN**

- Working on acquisitions analytics project using machine learning techniques
- Perform data analysis and trip generation on travel demand data in Chicago and Dallas metropolitan areas for Urban Air Mobility project in conjunction with NASA Langley Research Center

Purdue University**January 2020 – May 2020****Graduate Statistical Consultant****West Lafayette, IN**

- Provided statistical consulting and collaboration to graduate students and faculty
- Provided advice and assistance with the design of experiments, data analysis, statistical modeling, and data processing

Purdue University**August 2019 – December 2019****Graduate Teaching Assistant****West Lafayette, IN**

- Taught three sections of Analytic Geometry and Calculus I, led discussion and quiz groups of ~30 students, provide feedback and check understanding of topics by grading quizzes and homework
- Serve as a guide and mentor for undergraduate students

University of California – Irvine**September 2016 – June 2017****Learning and Academic Resource Center Math Tutor****Irvine, CA**

- Tutored for single variable calculus I/II, led discussion groups of ~15 students, organized lesson plans
- Established main learning goals and assessed understanding of topics through discussion and quizzes

Sport Chalet**August 2015 – January 2016****Sales Associate****Aliso Viejo, CA**

- Located products and prices on computer system, provided and maintained exceptional customer service to answer product related questions

PRESENTATIONS

- **2017 UCI Undergraduate Research Symposium**
 - Senior honors thesis: "Gender Inequality in Education: Differences Between OECD, non-OECD, and Emerging Economies."
- **2016 Sunbelt Conference (INSNA) in Newport Beach, CA**
 - Harrington, S.M., Smith, E.J., Butts, C.T., Hipp, J.R., Naggle, N.N., Boessen, A., & Almquist, Z. (2016). "Towards a Reference Network Cartography for the United States." 36th Sunbelt Conference (INSNA), Newport Beach, CA.

GRADUATE STUDIES PROJECTS

Fall 2020 Semester:

- **Applied Multivariate Analysis:** project focused on predicting the age of abalone from physical measurements, used data reduction techniques on a crude oil data set

Spring 2020 Semester:

- **Advanced Statistical Methodology:** predicting death count attributed to Covid-19 and analyze factors associated with the number of deaths

Fall 2019 Semester:

- **Data Mining:** project focusing on classifying spacecraft anomalies using multiple machine learning algorithms
- **Statistical Machine Learning:** project focusing on using a neural network model to forecast Federal Reserve interest rate decisions
- **Computational Statistics:** project on coding ridge, lasso, and OLS regression from scratch and analyzing the differences between the coefficient estimates of the different models
- **Intermediate Statistical Methodology:** project focusing on the relationship between educational attainment and economic indicators

Paul Kwame Ofori Agyiri

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Financial Services Risk Management Leader

Leader in Risk Management with experience in big data and analytics in the financial services industry. Highly effective at translating metrics and analytics into business insights and actionable recommendations. Experience in communicating risk policies and processes and providing hands-on development of risk models involving market, credit, and operational risk, assuring controls are operating effectively, and providing research and analytical support.

Key Strengths

SAS | SQL | Python | Tableau | Microsoft Office Suite | Reporting | Analysis | Credit Risk

Experience

Ernst & Young LLP, McLean, VA

July 2015 – October 2020

Manager, Financial Services Risk Management and Quantitative Advisory Services

Led the generation of qualitative and quantitative analytics and insights to enable major global financial institutions make strategic decisions around credit, market, and operational risk management.

- Directed the design, development, and implementation of the forecasted IFRS 9 stress testing methodology and models for a global bank's retail portfolio. Authored various reports and review / challenge packs that guided leadership decision-making on risk management enhancements. Resulted in the design of a standardized process to deploy the global methodology to each portfolio.
- Led model validation projects for major U.S. banks' retail portfolios, including mortgages, credit cards, and auto loans.
- Assessed model performance, governance, conceptual soundness, and implementation accuracy based on statistical analyses and regulatory guidance, and recommended corrective action guided by impact analyses.
- Analyzed risk strategies and frameworks within clients' regulatory compliance programs, benchmarked against industry standards, and developed comprehensive gap analyses and implementation roadmaps, thereby minimizing redundancies and inefficiencies in frameworks.

Cross Functional Leadership:

- Regularly coordinated collaboration across various internal and client departments, including Information Technology, Accounting Policy, Finance and Risk, to ensure all relevant stakeholders' business needs and inputs were addressed.

Communications:

- Leveraged technical, business, and financial acumen to translate data analytics into actionable insights, and effectively communicate project results and recommendations to technical and non-technical client executives and their respective teams. Communication media included verbal and MS PowerPoint visual displays of quantitative information, MS Excel dashboards and MS Word reports.

Team Management:

- Developed appropriate project plans to address critical client business needs and secured team resources to execute the plans.
- Trained junior consultants on quantitative modeling methodologies and analytics.
- Served as a counselor to four junior consultants, providing career guidance and presenting assessments of their performances at quarterly roundtables with senior executives.

Business Development:

- Co-managed and won more than five proposal bids, worth hundreds of thousands of dollars each, for large national and global banks.
- Co-managed the entire bid process, including creation of detailed client proposals covering analysis of existing environment, recommended solution, project timelines, pricing, and business case.

Fannie Mae, Washington, DC**February 2011 – July 2015****Financial Engineer, Credit Portfolio Management & Capital Markets**

Developed financial and statistical models for credit analysis, risk management, servicer performance measurement, and other projects aimed at reducing the credit risk in Fannie's portfolio and supporting Capital Markets Single-Family mortgage trading.

Selected Project Experience:

Leveraged data and analytics to optimize \$250bn non-performing single-family mortgage portfolio management:

- Facilitated and automated data aggregation across various teams.
- Utilized data to construct a proprietary, dynamic, discounted cash flow model to determine the intrinsic value of single-family mortgage portfolio assets.
- Reduced the intrinsic valuation processing time by about 20%.
- Structured portfolios of non-performing loans for potential sale based on assessment of economic impact of trading at market price as opposed to intrinsic value.
- Created the first ever in-house reporting tool to generate monthly pricing reports on various cohorts of non-performing loans, which cut down the report building time by 75%.
- Pioneered an algorithm for identifying hidden second lien loans to allow Fannie to better manage embedded credit risk.

Conducted quantitative analyses to support servicer performance improvements:

- Assisted in designing and building statistical models & scorecards to monitor, compare, and assess the performance of approximately 1,500 lenders & servicers relative to their peers.
- Presented business insights from analyses to senior management and portfolio managers, which informed actions taken to encourage servicer performance improvements.
- Authored white papers explaining the reasoning behind credit factors chosen for models and how the models were built.

Hawkeye Capital Group LLC, New York, NY**June 2008 – July 2009****Equity Trader, Proprietary Trading**

Successfully collaborated with senior equity traders to develop trading strategies that minimized risk, improved money management, and increased the firm's profits.

- Analyzed quote price-action, consolidated trend line levels, stock-futures correlation, and weighted relative strength and weakness in order to make trade decisions for a broad range of technology and financial stocks.

Education**Cornell University**, Ithaca and New York City, NY

Master of Engineering with concentration in Financial Engineering

Swarthmore College, Swarthmore, PA

Bachelor of Science in Engineering with concentration in Electrical Engineering & Bachelor of Arts in Economics

HUACHEN (CARL) QIN

11436 Cedar Ridge Dr, Potomac, MD 20854

Mobile: 1-443-676-6642 | E-mail: huachenqin@outlook.com

WORK EXPERIENCE

Fannie Mae

Washington, D.C.

Quantitative Modeler - Senior Associate

Mar 2019-Present

- Performed quantitative model analytics, development and performance tracking on agency Mortgage-Backed Securities (MBS) prepayment risk, including fixed-rate, reperforming and non-performing mortgages.
- Carried out quantitative research and reporting on MBS securities, including market risk, credit risk and cash flow etc. to support capital market business decisions.

Financial Economist - Associate

Oct 2017-Mar 2019

- Performed economic research and business analysis on long-term & on-demand topics such as: held on portfolio mortgage projections, private label securities issuance, non-qualified mortgage research, etc.
- Carried out data analytics, modelling and reporting utilizing SAS, R & R shiny, Python: agency MBS issuance market share, mortgage market originations, centralized mortgage lender database.

First Guaranty Mortgage Corporation

Tysons Corner, Virginia

Capital Market Analyst

May 2016-Sep 2017

- Maintained QRM (Quantitative Risk Management) system database and worked with trading desk to provide analysis & reporting on current market position and hedge against interest rate risk through MBS TBA trading;
- Carried out data analytics and modelling projects utilizing Excel & VBA, R & R Shiny: building mortgage insurance pricing engine, performing pricing engine clients reconciliations, hourly lock data reporting and predictions;
- Performed analytical data reporting on mortgage pipeline via Pricing Engine, and confirmed pricing for various origination channels to ensure accuracy and best execution;
- Backtesting of QRM model predictions and researched on company's MBS benchmark volatility using financial time series analysis.

Lombard Securities Incorporated

Baltimore, Maryland

Financial Technology Analyst Intern

Jan 2015-Oct 2015

- Assisted in managing broker daily trading activities and analyzed turnover rate data to prevent churning;
- Extracted trading data from SQL server to create mutual fund switch report and UIT switch report to help clients follow compliance procedure;
- Provided IT solutions advice to clients and helped maintain company website data report, including portfolio performance evaluation and broker yearly commission rates.

EDUCATION

Johns Hopkins University

Baltimore, Maryland

Master of Science in Financial Mathematics

Aug 2014-Dec 2015

• GPA: 3.89/4.0

Sun Yat-Sen University

Guangzhou, China

Bachelor of Science in Applied Mathematics

Sep 2009-Jun 2014

Double Bachelor of Arts in Anthropology

• GPA: 3.9/4.0

SKILLS

Computational Skills: R, Python, SAS, SQL, Bloomberg Terminal & API, QRM, and Excel & VBA

Certificates: Certified FRM (Financial Risk Manager), Bloomberg Essentials (BESS)

Visa Status: U.S. Legal Permanent Resident, do not require sponsorship