SUMMARY OF QUALIFICATIONS

- Two years of work experience as a data scientist; total 4+ years of data engineering experience
- Developed/implemented algorithms that save my employer 3+ hours/day per client of manual optimization work
- Superb grasp of applied machine learning methods (e.g., neural nets, clustering, anomaly detection, classifiers)
- Skilled in application of deterministic, probabilistic and Monte Carlo simulation models
- Extensive experience in client-facing situations (including presentations to C-level executives and board members)
- Frequently involved with and proven professional success in new business/business development opportunities

EDUCATION

Columbia University – Department of Industrial Engineering and Operations Research

New York, NY

Master of Science in Operations Research (Concentration: Optimization)

Coursework: Stochastic and Deterministic Modeling, Monte Carlo Simulation, Supply Chain Management, Corporate Economics, Project Management, Service/Reliability Engineering, Control Theory, Microfabrication Techniques

University at Albany – The Honors College

Albany, NY

Bachelor of Science *summa cum laude* (Majors: Physics, Math; Minors: Electronics, Economics) Honors Thesis: *Robust and Economical Autonomous Navigation via Advanced Bayesian Methods*

Awards: Phi Beta Kappa, Honors College Graduate, Provost's Award for Outstanding Research, Ben V. Smith Science Scholar, Anne R. Oliver Memorial Physics Scholar, Outstanding Senior Award (top 20 graduates)

RELEVANT EXPERIENCE

R/GA – Interpublic Group of Companies

New York, NY

Data Scientist (Add'l roles: Product Manager, Investment Strategy Consultant)

05/2013 - Present

Title progression: Analyst Intern, Associate Analyst, Connections Analyst, Connections Planner

- Initiated development of investment optimization platform; coded optimization algo for Google AdWords and Bing Ads
- Lead majority of department's data-wrangling and predictive analysis/modeling projects (mostly time-series data)
- Report directly to global department head at firm; advanced 4 years' equivalent of promotions in 1.5 years
- Manage department post-graduate summer interns (MS and PhD students from top-tier engineering programs)
- Prototype and implement rapidly deployed algorithms on client data (usually scalable machine learning setups)
- Co-led the pitch and won the department's largest 2 clients (Godiva: \$8.1 million and Altisource: \$15 million)

SKILLS

Prototyping/Programming: Python, Matlab/Octave, C++, R, Java, VB.NET

Tools/Libraries: SciPy, NumPy, pandas, scikit-learn, ggplot, matplotlib, nltk, SymPy, IPython

Personal Projects: Optical character recognition system (neural nets), stock movement prediction system (HMM/RNN)

Scripting/DBMS: Unix/Bash, JavaScript, VBA, SQL, MongoDB (NoSQL), Hadoop (MapReduce/distributed computing)

Languages: Beginner [Spanish, Chinese]; Native [English, Urdu]; Native Spoken-only [Punjabi, Hindi]

Interests/Hobbies: Film photography, deep learning, behavioral economics, linguistics/NLP, acoustic engineering

PROFESSIONAL DEVELOPMENT

Machine Learning	Andrew Ng	Stanford University	Coursera
Intro to Hadoop and MapReduce	Sarah Sproehnle	Cloudera Inc.	Udacity
Financial Engineering + Risk Management	Martin Haugh	Columbia University	Coursera
Python: Intro to Computer Science	Dave Evans	University of Virginia	Udacity
Algorithms (and Data Structures)	Michael Littman	Brown University	Udacity

AFFILIATIONS

Master of Ceremonies (multiple events), International House NY, Columbia University	2013 - 2014
Official Photographer, International House NY, Columbia University	2012 - 2013
Treasurer, Omicron Delta Kappa, University at Albany	2011 - 2012
President, Society of Computing and Networking, University at Albany	2010 - 2012