

NITIN SHYAMKUMAR

1451 Belmont St NW, Apt 010
Washington, DC 20009

nitinshyamk@gmail.com
(425) 647-0393

OBJECTIVE

Seeking new engineering role to work on challenging technical problems with an opportunity for large impact

INDUSTRY

Applied Predictive Technologies

Arlington, VA

Software Engineer

July 2017 – Present

- Developed general infrastructure and modeling tools for analytics across the firm
- Investigated MARIMA and other techniques for forecasting client transaction time series, modeling led to 12% lower error rate over conventional modeling techniques by peers
- Implemented new infrastructure for outlier detection mechanisms using QR decomposition routines
- Corrected an error in econometric modeling that underestimated impact of treatment variable by ~10-20%
- Wrote large portion of frontend tools in React/Redux/Sagas application that streamlined modeling workflow and simplified client usage of modeling tools
- Profiled internal modeling library performance and implemented parallelization routine that halved running time
- Co-lead Cornell campus recruiting efforts, diversity and inclusion group, and data science research effort

Uber Technologies

San Francisco, CA

Software Engineering Intern, Realtime API

Jun 2016 – Aug 2016

- Built monitoring tools for Realtime API routing infrastructure and middleware
- Implemented feature to dynamically update service routing configurations

Hudson River Trading

Algorithm Developer Intern, Algorithm Development

Jan 2016

- Researched and developed profitable automated trading strategy for Brazilian equities

RESEARCH

Sublinear Estimation of a Single Element in Sparse Linear Systems

Siddhartha Banerjee

Allerton Conference on Communication, Control, and Computing

October 2016

- Primary author of randomized algorithm for approximating single element solutions to matrix equations

Cortical Control of Kinematic Primitives in Mice

Jesse Goldberg

Preprint

Aug 2014 – Dec 2015

- Conducted analytical investigations of variability in rodent motor learning systems.
- Primary architect and developer of data analysis software suite and initial lead for trajectory decomposition analysis

EDUCATION

Cornell University, College of Arts and Sciences

Aug 2013 – May 2017

B.A. Mathematics *cum laude*

B.A. Computer Science

GPA 4.01

Awards: Phi Beta Kappa, Tanner Dean's Scholar, Dean's List (2013-2017)

Activities: Cornell Data Science (Education Lead), Alpha Phi Omega (community service)

Most Valuable Coursework: Stochastic Processes, Machine Learning, Graduate Algorithmic Game Theory, Algorithms, Honors Analysis I, Dynamical Systems, Constitutional Law

SKILLS & INTERESTS

- Proficient in R, SQL, C#, MATLAB, Typescript, React/Redux/Sagas
- Experience with C++, Java, Python (numpy/scipy/sklearn), UNIX
- Experience in statistical and econometric modeling including independent coursework, machine learning on large datasets, stochastic models, data visualization, causal inference
- Interests include mountain biking, Brazilian jiu jitsu, skiing, sketching classical sculptures