Rishab Srivastava

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Strong software engineering background with experience in ML infrastructure, data engineering, cybersecurity

EDUCATION

University of California, Berkeley — **Berkeley, CA**
Bachelor of Arts *(magna cum laude)* — Grad. May 2020
Computer Science and Economics *(with highest honors)* — **Cum. GPA:** 3.84/4.0
Honors Thesis: First-Degree Price Discrimination: Evidence from Informal Markets in India — **Econ GPA:** 3.941/4.0
Relevant Coursework: CS: Machine Learning, Database Systems, Artificial Intelligence, Data Science, Algorithms and Data Structures
Economics: Honors Econometrics and Microeconomics, Financial Economics, Macroeconomic Policy and History, Behavioral Economics
Dean's Honors List Recipient: Fall 2016, Fall 2018, Spring 2019, Fall 2019, Spring 2020
Skills: Python, Scala, Spark, Java, Kubernetes, Docker, Airflow, Terraform, AWS, SQL, Kafka, STATA

PROFESSIONAL EXPERIENCE

Salesforce, Inc. — **San Francisco, CA**
Software Engineer II (**Security Einstein**) — May 2019 - August 2019, July 2020 - present
Salesforce's highly selective flagship machine learning cybersecurity team

- Primary ownership of 4 high-impact ML services; developed incremental customer-centric features to improve operational and efficacy outcomes such as true positive rate, time-to-detect, throughput, and latency
- Tech lead for development of a self-serve EKS-based JupyterHub REPL framework to increase velocity of data exploration process
- Developed E2E a PCA-based anomaly detection model BadAppl: Behavioral Anomaly Detection at App Layer to detect insider threats
- Promoted in < 1 year (fastest track), took on additional product ownership and scrum leadership responsibilities
- Languages used: **Scala, Python, Spark, Java** with extensive use of **Terraform, Airflow, Docker, K8s, Ansible, AWS** technologies

Department of Economics, University of California, Berkeley — **Berkeley, CA**
Research Assistant — June 2020 - June 2021

- **Prof. David Card:** *Nobel laureate, labor economist; President, American Economic Association and Chair of Economics Dept.*
- Analyzing the effects of the Medically Underserved Areas (1978) policy on health outcomes; sole RA responsible for complete research pipeline - research, data analysis, modeling; wrote over 1000 lines of code in Python (Pandas, Statsmodels, SciPy)

Helios Capital Management — **Singapore**
Quantitative Summer Analyst (Long/Short Equity) — June 2018 - August 2018
Asia-focused hedge fund with AUM of $300M primarily trading in Indian equities, derivatives and FX

- Used demand projections, unit economics, and multivariate regressions to create a bottom-up valuation methodology, forecasting financial variables with multiple backtests that contained true parameter (net revenue, COGS) within 2-3 SDs of predicted statistic
- Developed a pair-trading streaming application 'Helios TwinTrader' to assess statistical arbitrage opportunities using NetworkX, Kafka

Department of Electrical Engineering and Computer Science, UC Berkeley — **Berkeley, CA**
Lead Undergraduate Student Instructor (DATA 8: Foundations of Data Science) — August 2017 - May 2020

- Led 2 discussions sections over 6 semesters each teaching statistical inference techniques for UC Berkeley's fastest growing course
- Developed grading infrastructure used to automate evaluation of 20+ assignments for 750+ students per semester

PROJECTS

PID Control & Monetary Policy — **Python (SciPy), MATLAB**

- Wrote a Python script around a MATLAB-based Macroeconomic Model database; developed an extensive API in Python to create robust monetary policy rules using (PID) control theory and non-linear constrained optimization in SciPy

Modified Traveling Salesman Problem — **Python, NetworkX**

- Built a solver in Python for a harder variant of the famously intractable problem; finished above 90th percentile in 400 person class
- Developed greedy algorithms, and heuristic algorithms such as Christofides to estimate optimal solutions for over 1200 graphs

AWARDS AND HONORS

- **University of Chicago Predoctoral Fellowship:** Highly selective 2-year program under Prof. Eric Zwick. Declined.
- **Member, Upsilon Pi Epsilon (CS Honor Society)**: top 20% of all declared CS majors at UC Berkeley
- **1st Place, NASA International Space Settlement Design Competition, Kennedy Space Centre**
- **AP Scholar with Distinction:** Scored a perfect score on 5 advanced placement tests as an international student
- **International Chess Player:** Awarded world rating of 1350 by the World Chess Federation (FIDE)