SRAJAN GARG

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PROFESSIONAL EXPERIENCE

Rippling — New York
Senior Software Engineer — Jul '23 – Present

- Part of the three-person Global Payroll Remittances team at rippling responsible for orchestrating tax payments for companies across the globe

Jump Trading — New York
Quantitative Researcher — May '22 – Mar '23
Quantitative Research Intern — Oct '21 – Dec '21

- Researched working on different proprietary trading strategies spanning multiple teams within Jump

Tower Research Capital — Gurgaon
Quantitative Trader — Jul '18 – Jul '20

- Part of a team of traders in New York, Shanghai and India trading commodity derivatives in exchanges all over the world
- Research new signals using market micro-structures, model movements based on correlated products and deploy using highly optimized C++ to achieve microsecond level latencies

Jane Street Capital — Hong Kong
Software Developer Intern — May '18 – Jun '18

- Implemented real-time streaming of position-server data using Apache Kafka to improve scalability and robustness

Microsoft Research — Bangalore
Machine Learning Intern — May '17 – Jul '17

- Implemented optimized versions of out-of-memory BLAS (Basic Linear Algebra Subprograms) routines by using data prefetching, laid the foundations of a C++ library to write complex terabyte scale algorithms using optimized sub-routines

RESEARCH EXPERIENCE

Applied Finance Project - Liquidity Providers in Uniswap
Prof. Christine Parlour, UC Berkeley — Jan '22 – Mar '22

- Analysis of profitability of liquidity providers to Uniswap pools and comparing v3 protocol against v2 protocol

Bachelor Thesis - Adversarial Optimization for 3D Shapes
Dr. Siddhartha Choudhuri, Adobe Research — May '17 – May '18

- Automatic editing of 3D shapes using Generative Adversarial Networks
- Used tensorflow to implement the generator and adversary using U-nets

SymEngine - a C++ symbolic computation library
Dr. Ondrej Certik — Dec '15 - Jun '17

- Core contributor and maintainer of Symengine, a fast open-source library
- Part of Google Summer of Code '16 as a contributor and Google Summer of Code '17 as a mentor

EDUCATION

Master of Financial Engineering
Haas School of Business, UC Berkeley
GPA: 3.6/4 — 2021 – 2022

Bachelor of Technology, Computer Science
Indian Institute of Technology Bombay
GPA: 9.36/10 — 2014 – 2018

PUBLICATIONS

- **16th USENIX Symposium on Networked Systems Design and Implementation (NSDI), 2019**
  BLAS-on-flash : An Efficient Alternative for Large Scale ML Training and Inference

TECHNICAL SKILLS

- Python, C++, R, MATLAB, SQL, bash, Go
- Git, CMake, Numpy, Pandas, Scikit, Tensorflow, Keras, Django, OpenGL, Excel, LaTeX, Tableau, Power BI, Grafana, Docker, InfluxDB, MATLAB, dbt, AWS, GCP
- Time Series Forecasting, Regression, Clustering, Segmentation, Deep Learning, Genetic Algorithms, Recommendation Algorithms

RELEVANT COURSES

- Empirical Methods in Finance, Derivative Pricing, Stochastic Calculus, High-Frequency Finance, Fixed Income Markets
- Data Structures and Algorithms, Probability and Statistics, Artificial Intelligence, Machine Learning, Information Retrieval, Data Mining
- Operating Systems, Computer Networks, Compilers, Computer Architecture

ACHIEVEMENTS

ICPC Nationals
Rank 43 at national onsite — 2015

IIT-JEE Advanced
All India Rank 21 — 2014

National Physics Olympiad
Top 300 in India — 2013

National Mathematics Olympiad
Top 300 in India — 2013