Sidhant Bansal

http://sidhantbansal.com | sidhbansal@gmail.com

EDUCATION

STANFORD UNIVERSITY
MS in Computer Science
2023 - 2025 | GPA: 4+/4.0
Theory Track

NATIONAL UNIVERSITY OF SINGAPORE
BComp in Computer Science
2017 - 2021 | GPA: 4.8/5.0
Turing Programme
Minor in Mathematics

COURSEWORK

Design and Analysis of Algorithms
Randomized Algorithms
Advanced Algorithms
Machine Learning
NLP with Deep Learning
Parallel Computing
Computer Networks
Operating System
Quantum Computing
Convex Optimization
Probabilistic Methods
Statistics
Advanced Linear Algebra
Game Theory

TA

Mining Massive Datasets†
Modern Algorithmic Toolbox†
Parallel & Distributed Algorithms*
Design & Analysis of Algorithms*
Data Structures & Algorithms*
† *At Stanford*
∗ *At NUS*

SKILLS

Programming Languages
Experienced:
•Modern C++ •Python •Ocaml
Familiar:
•Java •SQL •Solidity
•Javascript •Q
Tools and Frameworks:
•Numpy •Pandas •Scikit-learn
•Cuda •Kafka •Git •Vim •Bash

LINKS

LinkedIn:// **sidhant-bansal**
Github:// **sidhant007**
DevPost:// **Sidhant**
Codeforces:// **sidhant**

EXPERIENCES

TOWER RESEARCH CAPITAL | Quant Trader

June 2025 - Present | New York City

- WIP

TOWER RESEARCH CAPITAL | Quant Trading Intern

June 2024 - August 2024 | New York City

- Improved correlation with the target by 11% (relative) over existing predictions in future markets (intra-day frequency) by integrating market conditions into an attention-based neural network.
- Resolved auto-correlation issues in market data sampling, increasing the entropy of sub-sampled training data.

CITADEL SECURITIES | Dev Full Time

August 2021 - June 2023 | London, New York City

- Built a real-time reconciliation service in **C++** to process 100M+ daily orders, using lock-less data structures for parallelism and throughput.
- As part of options team, implemented the end-to-end pipeline for (i) absorbing speculated corporate actions from external third party sources, (ii) normalizing them and (iii) feeding them into trading strategies.

DRW | Dev Intern

May 2020 - August 2020 | Singapore

- Developed tooling to compress market data received from the exchange.
- Engineered the command line feature **conda compare** in the open-source environment manager **Conda**, to enhance the daily workflow of researchers.

JANE STREET CAPITAL | Dev Intern

May 2019 - August 2019 | Hong Kong

- Contributed to multiple projects in post trade and trading system teams.
- Worked extensively with **Ocaml**, a functional programming language.

RESEARCH

ALGORITHMIC MARKET DESIGN | Stanford Impact Lab

March 2024 - March 2025 | Prof. Itai Ashlagi and Prof. Irene Lo

- Improved the existing multinomial-logit models (via feature engineering) to forecast student preferences for public school allocation in San Francisco.
- Simulated varying policy designs with trade-offs across metrics for distance, choice and diversity, and presented findings to SFUSD.

1-BIT COMPRESSED SENSING | NUS Final Year Thesis

April 2020 - Jan 2022 | Prof Arnab Bhattacharya

- Established a lower bound (tight up to logarithmic factor) for **1-bit compressed sensing** in a specific setting.
- Published in **IEEE ISIT 2022** and slides at **sidhantbansal.com/nusfyp.pdf**

ACHIEVEMENTS

2020	22	ACM-ICPC World Finalist (Invitational)
2019	Top 5%	Dean's List for Fall'19
2019	1ST	ACM-ICPC Kaula Lumpur Regional Contest
2019	62ND	ACM-ICPC World Finalist
2018	1ST	ACM-ICPC Yangon Regional Contest
2017	Bronze	International Olympiad in Informatics (IOI)