Sidhant Bansal

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EDUCATION

NATIONAL UNIVERSITY OF SINGAPORE

BCOMP IN COMPUTER SCIENCE Minor in Mathematics 2017 - Present CGPA: 4.74/5.0

DELHI PUBLIC SCHOOL DWARKA

Grad. May 2017 | Delhi, India Grade 12 - 95.4% Grade 10 - 10 GPA President of the computing club

COURSEWORK

Design and Analysis of Algorithms
Randomized Algorithms*
Machine Learning*
Computer Networks
Parallel and Distributed Algorithms*
Advanced Linear Algebra
Competitive Programming
Software Engineering
* Ongoing Courses

TEACHING

Data Structures and Algorithms: Fall 2018, Spring 2018, Fall 2019

SKILLS

EXPERIENCED:

•C++ •Ruby •Javascript

INTERMEDIATE:

• Java • SQL • React

OTHERS:

•Git •Vim

LINKS

LinkedIn://sidhantbansal Github://sidhant007 DevPost://sidhant Codeforces://sidhant Kattis://sidhant-bansal

EXPERIENCE

NATIONAL UNIVERSITY OF SINGAPORE | RESEARCHER

January 2019 - Present

- Developing **distributed algorithm** to establish initial views in the view reconciliation problem for a **permissionless distributed peer to peer** system.
- Working under the guidance of **Prof Haifeng Yu**

XFERS | Software Engineering Intern

May 2018 - August 2018 | Singapore

- A full stack engineer at **Xfers**, a YCombinator Summer 2015 startup. Worked in **Ruby on Rails** and **React**.
- Designed and implemented internal tools to monitor data inconsistency in the system. All code was reviewed and pushed in production.

ACM-ICPC | PROBLEM SETTER

December 2017 - December 2018

- Designed and tested algorithmically challenging problems for the ACM-ICPC Indian Regionals sites.
- These problems were attempted by 300+ teams nationwide during the regional contests.

TECHNICAL BLOG WRITING | CONTRIBUTOR

March 2016

- Wrote a 2 post series titled **FFT The tough made simple**, on Codeforces.
- Explained the mathematics behind **Fast Fourier Transform (an optimisation** algorithm).
- Received over 350+ upvotes from the Codeforces community.

ACHIEVEMENTS

2018	1 ^{S1}	ACM-ICPC YANGON ON-SITE REGIONAL CONTEST
2017	5 [™]	ACM-ICPC JAKARTA ON-SITE REGIONAL CONTEST
2017	Bronze	INTERNATIONAL OLYMPIAD IN INFORMATICS (IOI)

PROJECTS

LIFE | AI SIMULATION

Personal Project | May 2018

- LIFE is a simulation to train a virtual organism to look for food in an optimal way in a two-dimensional world.
- Implemented a variant of **genetic algorithm** known as **Neuro-Evolution of Augmenting Topologies(NEAT)**.

GEOTRONER | REAL-TIME MULTIPLAYER GAME

NUS Hack&Roll | January 2018

- Won under the top 8 category for our project, **GeoTroner** a real-time multiplayer online game.
- Based on geographical location of the user inspired from the game Tron and Pokemon Go.
- Built using NodeJs, Google Maps API and Bootstrap.