

Sidhant Nagpal

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SKILLS

TECHNICAL

Algorithms • AI/ML • Open Source
Applied Mathematics • Deep Learning

PROGRAMMING

C/C++ • Python • Java • SQL
Bash • Go • LaTeX • HTML • CSS

TOOLS & FRAMEWORKS

PyTorch • Keras • scikit-learn • NumPy
Jupyter • Matplotlib • Selenium • Flask
Git • Travis CI • AWS SQS • DialogFlow

EDUCATION

UNIVERSITY OF DELHI

BE IN COMPUTER SCIENCE

2015-19 (expected) | Delhi, India
Netaji Subhas Institute of Technology
Percentage: 82.16% (Top 5%)

BAL BHARATI PUBLIC SCHOOL

Grad. May 2015 | Delhi, India
AISSCE (Class XII): 96%
AISSE (Class X): CGPA 10.0/10.0

PROJECTS

- **Deep Learning for CV and NLP**
CV - Image Denoising using CNN
NLP - Opinion Mining using RNN (LSTM)
- **Game Playing AIs**
Intelligent solvers for N-Puzzle, N-Queens,
Sudoku, Tic-Tac-Toe using Genetic Algorithms
- **Intuit Mint Assist (Hackathon)**
Expense tracking automation using Google
Assistant (AI) and NFC Trigger (IoT)
- **Ranking Application**
Python (Flask) Web App based on Elo rating
- **Algorithmic Progress Visualizer**
Web scraper and visualizer for tracking
algorithmic progress on Online Judges

LINKS

Github:// [SidhantNagpal](#)
LinkedIn:// [SidhantNagpal](#)
Twitter:// [@_SidhantNagpal](#)

EXTRA CURRICULARS

Bronze Medallist, Hockey Inter-Zonals
Bronze Medallist, Hockey Zonals
Best Player & Team Captain, Inter-School

EXPERIENCE

GOOGLE SUMMER OF CODE | DEVELOPER FOR SYMPY

Apr 2018 - Aug 2018 | Remote

- Implemented **discrete transforms, convolutions, recurrences** modules using efficient algorithms and paradigms (Dynamic Programming, Divide and Conquer) for **SymPy**, a **NumFOCUS** sponsored Python library for Symbolic Mathematics
- Contributed to SymPy bot (based on GitHub API) and Sphinx documentation

Mentors: **Aaron Meurer**, Lead developer, Staff scientist at University of South Carolina
Kalevi Suominen, Professor Emeritus, Dept. of Mathematics, University of Helsinki

INTUIT | SOFTWARE ENGINEERING INTERN

May 2018 - Jul 2018 | Bangalore, India

- Incorporated encryption logic and distributed message queue to decouple the monolith - **IntuitMarket.com** (QuickBooks E-commerce) for **AWS** migration
- Contributed to Intuit Data Protection Services (IDPS) SDK for Cryptography
- Hackathon runner-up for implementing **IoT & AI-based** solutions for **Intuit Mint**

RESEARCH

INDIAN INSTITUTE OF TECHNOLOGY | UNDERGRAD RESEARCHER

Jun 2017 - Jul 2017 | Kanpur, India

Studied the Dynamic Depth First Search problem in Graph Theory and presented an efficient algorithm based on the research paper [arXiv:1502.02481v3](#) by IIT Kanpur

POSITIONS OF RESPONSIBILITY

Google Code-in: Mentor for Sustainable Computing Research (SCoRe) Lab
PyCon India (PSF): Delegate, organised and conducted a developer sprint for SymPy
SymPy (NumFOCUS): Collaborator, core developer and pull request reviewer
We Care & Give Back (Intuit): Volunteer, created tactile stories for blind children
WARUDA (NGO): Volunteer, created awareness about computer literacy

PROGRAMMING EVENTS

| | | |
|---------|----------------|--|
| 2018 | Rank 464/24K+ | Google Code Jam Round 3 (semi-final) |
| 2017 | Rank 1668/25K+ | Google Code Jam Round 2 (quarter-final) |
| 2017 | Rank 105/1K+ | Google Kickstart Round G |
| 2017 | Rank 60/800+ | Google Kickstart Round B |
| 2017 | Rank 26/250+ | ACM-ICPC Asia Regionals, Amritapuri |
| 2017 | Rank 41/100+ | ACM-ICPC Asia Regionals, Gwalior |
| 2016-18 | Top 200/300K+ | Sphere Online Judge (SPOJ) |

ACHIEVEMENTS

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|---------|-----------------------------|---|
| 2016-17 | Merit Scholarship Award | Academic courses, University |
| 2016 | Ramanujan Award | Mathematics courses, University |
| 2016 | Section Rank 1/70 | Computer Science courses, University |
| 2015 | 99.81 percentile from 1.3L+ | Joint Entrance Examination (JEE) Main |
| 2015 | Fellowship Award | Kishore Vaigyanik Protsahan Yojana (KVPY) |
| 2014 | Top 1.33% of 3L+ | National Talent Search Examination (NTSE) |
| 2014-15 | Merit Scholarship Award | Science courses, High School |
| 2008-15 | Scholar Platinum Medal | Academic courses, High School |
| 2010 | IOM Silver Medallist | International Olympiad of Mathematics |
| 2010 | IMMO Silver Medallist | International Master Mathematics Olympiad |