Sidhant Nagpal

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SKILLS

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

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

TOOLS & FRAMEWORKS
PyTorch • Keras • scikit-learn • NumPy
Jupyter/Colab • Matplotlib • Selenium
Git • AWS SQS • DialogFlow • Flask

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 Search Heuristics
- **Intuit Mint Assist (Hackathon)**
Expense tracking automation using Google
Assistant (AI) and NFC Trigger (IoT)
- **Formal Language & Automata**
Finite, Push-Down Automata, Turing Machine
- **Ranking Application**
Python (Flask) Web App based on Elo rating
- **Algorithmic Progress Visualizer**
Web scraper for Programming Judges

LINKS

Github:// **SidhantNagpal**
LinkedIn:// **SidhantNagpal**
Web:// **SidhantNagpal.com**

EXTRA CURRICULARS

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

EXPERIENCE

GOOGLE SUMMER OF CODE | Developer for SymPy
Feb 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 modules for matrices, differential equations, solvers, combinatorial functions, SymPy bot (based on GitHub API) and Sphinx docs

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**

INDIAN INSTITUTE OF TECHNOLOGY | Undergrad Researcher
Jun 2017 – Jul 2017 | Kanpur, India
Studied the Dynamic DFS problem in Graph Theory and presented an efficient algorithm based on Heavy-Light Decomposition from the **arXiv** research paper by Dept. of CSE, **IIT Kanpur** under the supervision of **Dr. Raghunath Tewari**

POSITIONS OF RESPONSIBILITY

SymPy: Project Collaborator (a position funded by NumFOCUS) and PR reviewer
Google Code-in: Mentor for Sustainable Computing Research (SCoRe) Lab
PyCon India (PSF): Delegate, organised and conducted a developer sprint for SymPy
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

2016-17	Merit Scholarship Award	Academic courses, University
2016	Ramanujan Award	Mathematics courses, University
2015	99.81 percentile from 1.3L+	Joint Entance Examinantion (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