Dhruv Agarwal

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EDUCATION

ASHOKA UNIVERSITY
B.Sc. (H), Computer Science
May 2019 | Sonepat, India
Magna cum laude
Dean's List (All Semesters)
Major CGPA: 3.95 / 4.0
Cumu. GPA: 3.84 / 4.0

MT. ST. MARY'S SCHOOL
May 2016 | Delhi, India
Best of 4: 95.75%
Overall: 94%

SKILLS

Proficient:
Python • C++ • JavaScript •
PHP • CSS • HTML • LaTeX•
MongoDB • Flask • Git •
Keras (SciPy Stack)

Familiar:
C • Assembly • MySQL •
Node.js • Bash

COURSEWORK

Discrete Mathematics
Probability & Statistics
OS; PLDI (PLs); Networks
Algo; Advanced Algos
Data Visualization
Theory of Computation
Security; Linear Algebra
ML; Advanced ML; NLP
Teaching Assistant:
Short Course on Big Data
Machine Learning

LINKS

Github:// **agdhruv**
LinkedIn:// **agdhruv**

ACCOLADES

Rhodes Scholarship Shortlist
ACM ICPC Regionals
Alok Bhatla True Marian
Entrepreneurial Initiatives

WORK EXPERIENCE

MICROSOFT | Research Intern
May 2019 – August 2019 | Bangalore, India
- Designed an algorithm to maximize city coverage for Drive-by sensing.
- Implemented by Ola Cabs ($6.2 billion worth) – 300% improvement.
- Visualisations presented to Department of Science & Tech, Govt. of India.

MIRABILIS DESIGN | Software Engineering Intern
December 2018 – January 2019 | Chennai, India
- Developed a tool-chain to run system-level simulations of executables compiled for different architectures for performance analysis.
- Will be incorporated into VisualSim, a product used by NASA and Samsung.

AMPERSAND DESIGN | Development Intern
July 2017 – August 2017 | Gurgaon, India
- Developed industry standard interaction heavy web pages for SBI Card.
- Freelance job offers after the internship: chatbot interface for SBI Card.

PROJECTS

FAKE NEWS CHALLENGE Nov '19
- Solved the Stance Detection problem using a novel "staged" technique and achieved better performance than international competition winners.

VAHN: VEHICLE ACCIDENT HAZARD NOTIFIER Aug '18
- Developed a real-time Smart City system for automatic detection and reporting of road accidents using machine learning and vision.
- Adjudged 5th best project out of 400 teams pan-India at Hack-IIITD.

ENERGY MONITORING SYSTEM Aug '17 - Dec '17
- Developed a prototype to relay occupants of hostel rooms their real-time energy wastage, and allow comparison with their past usage statistics.

ASHOKA MENU AND SHUTTLE BOT Mar '17
- As IT Minister in the Student Government, developed a Bot to inform users about mess menu, shuttle timings, infirmary contact details.
- Over 800 unique users and 190k messages sent and received.

RESEARCH PUBLICATIONS

1. Poster: System for Vehicle Selection in Drive-by Sensing. D. Agarwal, S. Iyengar, M. Swaminathan. 17th ACM Conference on Embedded Networked Sensor Systems (SenSys 2019). Accepted.
2. Modulo: Drive-by Sensing at City-scale on the Cheap. D. Agarwal, S. Iyengar. Interactive, Mobile, Wearable and Ubiquitous Technologies (IMWUT). Submitted.
3. A Billion Souls: A Security & Privacy Review of India's "Aadhaar" Biometric ID. D. Agarwal, P. Jain, S. Dasgupta, D. Gupta. IEEE European Symposium on Security and Privacy (EuroS&P) 2020. Submitted.