

Dhruv Agarwal

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EDUCATION

ASHOKA UNIVERSITY

B.Sc. (H), COMPUTER SCIENCE
May 2019 | Sonapat, India
Magna cum laude
Dean's List (All Semesters)
Major CGPA: 3.95 / 4.0
Cumulative GPA: 3.84 / 4.0

ASHOKA UNIVERSITY

ASHOKA SCHOLARS PROGRAM
May 2020 | Sonapat, India
Yet to start

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

Familiar:

C • Assembly • MySQL •
Node.js • Bash

COURSEWORK

Discrete Mathematics
Probability & Statistics
Operating Systems
Algorithms Design
Data Visualization
Computer Networks
Programming Languages
Theory of Computation
Computer Security
ML; Advanced ML
Teaching Assistant:
Short Course on Big Data
Machine Learning

LINKS

Github:// [agdhruv](#)
LinkedIn:// [agdhruv](#)

WORK EXPERIENCE

MICROSOFT | RESEARCH INTERN

May 2019 – August 2019 | Bangalore, India

- Deployed a vast low-cost air pollution sensor network across Bangalore.
- Collected 1.5 million data points per month, stored them, processed them for statistical analysis, machine learning analysis and big-data visualisation.
- Submitted a paper to ACM IMWUT and a poster to ACM SenSys.

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.
- Tool will be incorporated into VisualSim, a simulation product used in system design by NASA and Samsung.

AMPERSAND DESIGN | DEVELOPMENT INTERN

July 2017 – August 2017 | Gurgaon, India

- Developed industry standard interaction heavy web pages for the State Bank of India Card (SBI Card) website using HTML, CSS and JavaScript.
- Quality of work and commitment was rewarded with freelance job offers after completion of the internship: chatbot interface on SBI Card homepage.

PROJECTS AND RESEARCH

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.

ENERGY MONITORING SYSTEM Aug '17 - Dec '17

- Developed a prototype to inform the occupants of hostel rooms about their real-time energy wastage, and allow comparison with their past statistics in monetary terms.

VAHN: VEHICLE ACCIDENT HAZARD NOTIFIER Aug '18

- Developed a real-time Smart City system for automatic detection and reporting of road accidents, using a machine learning and vision algorithm, for reduced relief response time and avoiding chaining of accidents.
- Adjudged 5th best project out of 400 teams pan-India at Hack-IIITD.

SIGNATURE VERIFICATION/FRAUD DETECTION Nov '18

- Trained a convolutional neural network to detect forgeries in signatures to detect fraud in virtually any human-oriented setting.

AADHAAR CYBERSECURITY ANALYSIS Jan '19 - Present

- Gauged the legitimacy of media reports against Aadhaar and suggested mitigation strategies for the legitimate ones.
- Looked for vulnerabilities in the system and reported them to UIDAI as constructive criticism.