Dhruv Agarwal

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EDUCATION

ASHOKA UNIVERSITY

B.Sc. (H), COMPUTER SCIENCE

May 2019 | Sonepat, India Dean's List (All Semesters) Major CGPA: 3.98 / 4.0 Cumu. GPA: 3.81 / 4.0

MT. ST. MARY'S SCHOOL

May 2016 | New Delhi, India Best of 4: 95.75%

SKILLS

Proficient:

Python • C++ • JavaScript • PHP • CSS • HTML • LATEX

Familiar:

C • Assembly

Database Management:

MySQL • MongoDB

Others:

Git • Bash • Flask • Node.js

Designing:

Adobe Photoshop

COURSEWORK

Discrete Mathematics
Probability & Statistics
Computer Organization & Systems
Operating Systems
Algorithms Design & Analysis
Data Visualization

Introduction to Machine Learning Computer Networks

Programming Languages Design

Ongoing:

Theory of Computation Computer Security and Privacy Computational Linguistics Advanced Machine Learning

Teaching Assistant:

Short Course on Big Data

LINKS

Github:// agdhruv LinkedIn:// agdhruv

EXPERIENCE

MIRABILIS DESIGN | SOFTWARE ENGINEERING INTERN

December 2018 - Present | Chennai, India

- Currently developing a tool to run system-level simulations of executables compiled for different architectures for performance analysis.
- Using virtualisation and emulation software and cross-compiler tool chains.
- Tool will be incorporated into <u>VisualSim</u>, a simulation product used by organizations engaging in system design, including 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.

FREELANCER | CONSULTANT AND DEVELOPER

June 2015 - Present | Gurgaon, India

- Developed web applications for startups, initiatives and festivals using PHP, core WordPress and front-end technologies.
- Collected and mined data using API calls and scraping techniques.

PROJECTS

ASHOKA MENU AND SHUTTLE BOT Mar '17

- As IT Minister in the elected Student Government, developed a Messenger Bot to inform users about the mess menu for the day, timings of the shuttle service, etc.
- Over 800 unique users and 190k messages sent and received.
- Awarded "Creative and Entrepreneurial Initiatives" award by the Vice Chancellor.
- Tech stack Python (+ Flask), MongoDB and Facebook APIs.

ENERGY MONITORING SYSTEM Aug '17 - Dec '17

- Developed a prototype to inform the occupants of a room about their real-time energy wastage, and allow comparison with their past statistics in monetary terms.
- Tech stack Arduino (C++), Raspberry Pi, Python (+ Flask), MySQL

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.

TEAM EXPERIENCE

- 2016 Head of Tech team for inaugural inter-varsity cultural fest
- 2017 Founder and organizer of the inaugural inter-varsity sports fest
- 2018 Fest Secretary of the sports fest (headed 70 member team)
- 2018 Started "Project Muskaan" to teach computers to village kids
- 2016-2018 Represented University in Badminton, Lawn Tennis, and Football