Ayush Maganahalli

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EDUCATION

UC BERKELEY
B.S. Electrical Engineering and Computer Science
Expected May 2020 | Berkeley, CA

COURSEWORK

UNDERGRADUATE
CS61A: Structure and Interpretation of Computer Programming
CS61B: Data Structures
CS61C: Machine Structures
CS70: Discrete Mathematics and Probability Theory
CS160: User Interface and Design
CS161: Computer Security
CS162: Operating Systems
CS170: Efficient Algorithms and Intractable Problems
CS188: Introduction to AI
CS195: Social Implications of Computing
EE16A/B: Designing Information Systems I/II
PHYSICS7A: Classical Mechanics
PHYSICS7B: Thermodynamics, Electricity, and Circuit Analysis
CS189: Machine Learning
CSC100: Principles of Data Science

SKILLS

TECHNICAL
Python • Java • JS • C • Spark • Go
HTML/CSS • Django/Bootstrap • Git

LINKS

Github: https://github.com/ayushsm
LinkedIn: linkedin.com/in/ayush-maganahalli-2408b4153

LEADERSHIP

2018-'19 Cal Badminton President
2018-'19 EthiCAL Marketing Dept.
2018-'19 BMES Corporate Committee
2015-'16 DVHS LD Debate Captain
2007-'16 FLL/VEX Robotics Captain

WORK EXPERIENCE

CS 61C UNDERGRAD TEACHING ASSISTANT | CS uGSI TA
Summer 2018 - Current | San Ramon, CA
- 8 hour per week student instructor with 2-hour labs and office hour tutoring
- Taught Berkeley students about data structures and machine architecture

UC DAVIS | Research Assistant and Software Development Intern
June 2015 – August 2015 | Davis, CA
- Led research and data analysis on fruit cracking and its causes
- Hypothesized potential solutions; to be tested by the Dept. of Pomology
- Programmed using SAS, imageJ, C, and Python to create macros/scripts

STANFORD SCHOOL OF MEDICINE | Software Development Assistant
May 2014 – August 2014 | Pleasanton, CA
- Worked with medical professionals on combining robotic surgery and telecommunications
- Attempted to solve for latency, transportation, and ease of interfaces
- Collaborated with telecom companies for feasibility of models on long-distance robotic surgery

PROJECTS

RECEIPT READER | Computer Vision and Regex
Nov 2018 – Current
- Used Google Vision to scan receipts to make JSON strings of receipt
- Parsed string with Python and prompted the user for input to verify info
- Computed total pricing/price per input and input to database for later use

AUTOMATED JOB SEARCH | APIs and Database Management
Oct 2018 – Current
- Create databases via web-scraping for storage of jobs for users to access
- Construct APIs for users to easily interact with utilities

EDUCARBON | Children's Climate Change Education
July 2018 – Current
- Interactive website teaching children of the effects of climate change
- Built with Python, Django/Bootstrap, HTML/CSS, and Javascript

GITLET | Miniature Version-Control Systems
May 2016 – Aug 2016
- Constructed in Java, using Java's collections objects
- Allows adds, commits, removes, and resets while logging all commits
- Supports branching, merging, checking out, and detects merge conflicts

AWARDS

2015/16	National	Distinguished Honor Roll (top 1%) American Mathematics Competition 10/12
2016	National	5th - World Schools National Debate Tournament
2016	State	5th - Policy California State Debate Tournament
2015	International	22nd Overall - World Championships
2013	International	3rd Project/22nd Overall - FLL Legoland Internationals