Ayush Garg

ayushgarg.ag@gmail.com | 720.606.3690

www.linkedin.com/in/ayush-garg-ag/ | https://github.com/ayushgarg-ag

EDUCATION

DUKE UNIVERSITY
Expected May 2024 | Durham, NC
Pursuing BS in Computer Science

Relevant Courses:
Algorithms and Data Structures
Intro to Economics
CS & Programming in Python (MIT)

Activities: Duke Applied Machine Learning, Club Tennis, Rhydhun (Bollywood dance team)

PEAK TO PEAK HS
May 2020 | Lafayette, CO
GPA: 4.0/4.0 (13 AP Courses)
SAT: 1560/1600; ACT: 35

Relevant Courses:
Adv. Data Structures (Java)
Multivariable Calculus
Differential Equations
AP Statistics

Awards: Summa Cum Laude, National Merit & AP Scholar

Leadership: Reading Buddies (Founder), Environmental Club (Founder), Science Olympiad (Captain), Debate (Captain, TA), NHS (Council)

SKILLS

Intermediate: Java • Python • Javascript (Node, jQuery, Socket.io) • React Native • HTML • CSS • Flask

Learning: PHP • AJAX • MySQL • Firebase • Figma • Framer

Languages: English • Spanish • Hindi

Certifications: Responsive Web Design Developer (300 coursework hours)

HACKATHONS

• PennApps XXI (Created educational tool to learn about the world's geography): *Award: Best Use of Wolfram Technology*
• IDEATE: A Virtual Designathon (Prototyped a digital healthcare solution for nurses during COVID-19)

EXPERIENCE

PROJECT BECK | Web & Mobile Development Lead
June 2020 - Present | Virtual
- Implemented cognitive-behavioral therapy assistance for people with depression through an app built using React Native and cloud-hosted Firebase
- Designed front-end using Figma and Framer and back-end using Javascript
- Leading a team of 15 developers in building the company's web portal

BETSOL | Software Engineering Intern
May 2018 – Aug 2018 | Denver, CO
- Conducted and presented research to company executives on potential applications of blockchain technology for healthcare clients
- Streamlined Trello API calls for team organization by testing AJAX requests

ACE SPORTS | Tennis Lead Coach
June 2017 – Aug 2018 | Westminster, CO
- Supervised 4 assistant coaches and taught weekly 3-hour lessons to 50+ kids

RESEARCH

ENV. SCIENCES & POLICY DIVISION | CS & Statistics Researcher
Aug 2020 – Present | Duke University
- Building a web dashboard that depicts COVID-19 transmission risks indoors
- Assisting design of statistical modeling systems for infectious disease spread

ATLAS INSTITUTE | AI & ML Researcher
Aug 2018 – Apr 2019 | University of Colorado Boulder
- Defined a natural language processing (NLP) research project on how autonomous assistants can learn to interpret various prepositional phrases
- Developed 6 machine learning models using Python by scraping MTurk data sets and utilizing Vicon tracking software to conduct a human experiment

PROJECTS

SUDOKU WEB AND MOBILE APPLICATIONS
Python (Flask/Jinja2), Javascript (jQuery), HTML, CSS
- Architected and created a Sudoku web application that allows users a customizable experience in which they can play and solve Sudokus
- Spearheaded the back-end Python backtracking algorithm and the Javascript/HTML needed for seamless user experience and interaction
- Constructed a related iOS/Android mobile app from scratch using React Native

HELP-REQUEST CONTENT MANAGEMENT SYSTEM
PHP, SQL, AJAX, HTML, CSS
- Automated a system that allows students to request live help from a teacher
- Instituted password-protected back-end access for teachers and independent front-end access to a self-processing form for students

API DATA MAP VISUALIZATION
Javascript, AJAX, JSON, SVG, HTML, CSS
- Extracted real-time World Bank API data of country developmental levels with AJAX and JSON calls and visualized it on an SVG world map using Javascript