

Ayush Garg

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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, Ethical Tech

PEAK TO PEAK HS

May 2020 | Lafayette, CO
GPA: 4.0/4.0 (13 AP Courses)

Relevant Courses:

Adv. Data Structures (Java)

AP Computer Science (Java)

Multivariable Calculus

Differential Equations

AP Statistics

Awards: Summa Cum Laude,
National Merit & AP Scholar,
Scholar Athlete of the Year

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

SKILLS

Intermediate: Java • Python • Javascript
• 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 and demography)
- 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
- Automated 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
- Focused on 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
- Provided 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