

Richard Guo

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EDUCATION

CARNEGIE MELLON UNIVERSITY

BS IN COMPUTER SCIENCE
Minors in Math and Software Engineering
Dec 2021 | Pittsburgh, PA
School of Computer Science
Dean's List
GPA: 3.89 / 4.00

PLANO WEST SENIOR HIGH

Grad. June 2018 | Plano, TX
Rank 1 of 1397. SAT: 1600

LINKS

Github:// richardg999
LinkedIn:// rwguo

COURSEWORK

- 17-214 Object-oriented design and concurrency
- 15-251 Theoretical Computer Science
- 15-210 Parallel and sequential algorithms
- 16-385 Computer Vision
- 15-122 Data Structures in C
- 15-150 Functional Programming
- 15-151 Discrete Math with proofs
- 27-241 Matrices and Linear Transformations

SKILLS

LANGUAGES

(Ordered by proficiency)
Java • JavaScript • Python • CSS
Ruby • HTML5 • C • Bash • C++
SQL • MATLAB • TypeScript • C#

FRAMEWORKS/TOOLS

Git • Linux • NodeJS • Firebase
Flask • ReactJS • jQuery • SocketIO
Android Studio • Windows Server
CreateJS • Unity

HACKATHONS

HackUTD 2018, EarthXHacks 2018,
PennApps 2018, HackCMU 2018,
HackThisHelpKids 2018,
Hack-a-Startup 2018, TartanHacks
2019

WORK EXPERIENCE

CMU PSYCHOLOGY DEPT - ISP TUTOR PROJECT

| FULL-TIME UNDERGRADUATE PROGRAMMER

May 2019 - August 2019 | Pittsburgh, PA

- Used HTML5 Canvas to create a user-friendly drag-and-drop interface for creating a concept map as part of the Hypothesis module. Used JavaScript and CreateJS library for drawing and events.
- Created an account registration/signin system to log user activity. Utilized a Firebase Cloud Firestore database to retrieve and post user information. Made optimizations in preparation for 200+ daily users.
- Created a custom Python tool to download data from Firebase and convert it into csv files.
- Converted our Background Research module (70+ pages) from a Google Site into a responsive custom-stylized collection of HTML pages using HTML/CSS.
- Configured and debugged our project's local IIS Windows Server for hosting additional webpages and an SSL certificate.
- Responsible for all major tech decisions for the research team for that summer.

CMU DATABASE GROUP - NOISEPAGE

| PART-TIME DASHBOARD DEVELOPER (6 HRS/WK)

May 2019 - August 2019 | Pittsburgh, PA

- Created dashboard to display various benchmark and coverage tests for NoisePage database. Data was sourced from GitHub, Jenkins, Travis, and CodeCov APIs. Used Ruby and Smashing framework.
- Added widgets including a line chart and a leaderboard.
- Programmed the line chart widgets to rotate and display additional benchmarks as new ones are added.

ACTIVITIES

SCOTTY LABS CLUB | DIRECTOR OF TECHNOLOGY

September 2018 - Present | Pittsburgh, PA

- Responsible for managing weekly tech talks and hack sessions
- Built custom-designed registration system using HTML/CSS/JS web stack for TartanHacks, one of the largest hackathons at CMU
- Redesigned and updated website for 2018 Web Development Weekend using CSS

PROJECTS

AUTOSCHEDULER | FRONTEND

February 2019

Designed a clean and responsive user interface using Bootstrap. Integrated the calendar component to display the data using jQuery and Sass. Submitted at TartanHacks.

AWARDS

- 2019 2nd place at Hack-a-Startup for autonomous vehicle camera startup Rayar
- 2018 1st place team at National Lockheed Martin CodeQuest (Java)
- 2018 USA Computing Olympiad Gold Division Qualifier (Java)
- 2018 1st place team at UT Dallas Battle of the Brains Programming Contest (Java)
- 2018 1st place team at National Academic WorldQuest in Washington D.C.
- 2016 SAT and PSAT perfect scores
- 2016 Two-time AIME Qualifier (Top 5% of scorers on AMC 12)