Gwen Bradforth

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New graduate from the University of Southern California seeking employment in the technology industry.

EDUCATION

University of Southern California | Bachelor of Science in Computer Science

2020 - 2024

- Awards: Deans List Fall 2021
- Relevant courses: Calculus I-III, Data Structures and Object Oriented Design, Linear Algebra, Embedded Systems, iOS App
 Development, Algorithms and Theory of Computing, Software Development/Engineering, Computer Security, Natural
 Language Processing, Artificial Intelligence, InterNetworking, Operating Systems

SKILLS

- Languages: Python, C/C++/C#, Java, Swift, SQL, PHP, HTML/CSS, Dart, Assembly, English, Japanese (N4)
- Frameworks: Flutter, Django, Flask, React
- Developer Tools: GitHub, Android Studio, Xcode, Jupyter, Visual Studio Suite, Docker, AWS
- Libraries: Tensorflow, PyTorch, Pandas, NumPy, OpenCV

WORK & RESEARCH EXPERIENCE

CURVE Fellowship

2023 - 2024

University of Southern California

Los Angeles, CA

- Collaborated with a Ph.D. student for 7+ hours a week to conduct a research study with 30+ dementia patients
- Developed Python program with Tobii Lab SDK to capture eye-tracking data, replacing \$4,000 software; implemented for study data collection
- Performed data analysis and multimodal training of machine learning models with eye-tracker and audio data, research paper in review

Computer Science and Math Instructor

2023

Juni Learning

Remote

- Taught one-on-one classes with students aged 6-16, gave instruction on Java, Python, and Algebra
- Met with each of 7 students for an hour a week as primary instructor

Research Student

2022

Cancer Research UK

Cambridge, UK

- Collaborated daily with graduate students in lab of Professor Sarah Bohndiek
- Developed front end web tool to execute imaging analysis using Django and Flask, presented project

CONFERENCE PAPERS

[1] A Multimodal Benchmark of Speech, Gaze, and Sketches for Detecting Alzheimer's disease and related dementias

Leticia Pinto-Alva, Leslie Moreno, Gwen Bradforth, Riley Ashford, Cecily Chung, Maja Mataric, Jesse Thomason (In Review)

Written on the results of study done during CURVE Fellowship - machine learning to detect Alzheimers SocalNLP 2023

PROJECTS

(In development) Collaborative Codewords | HTML/CSS, JavaScript, Python

2024

- Building a web-hosted game where players can solve programmatically generated puzzles
- Linked clients into P2P collaborative sessions with simultaneous live updates
- Learning Goals: Socket communication, multiplayer games, programmatic map generation

OutPlay | Swift, Python

2022

- Developed an iOS app for a reality-integrated capture-the-flag game
- Utilized map integration to place users on the map within their area for gameplay
- Won "Best Use of C/C++, Rust, Swift or Assembly" at AthenaHacks, sponsored by Raytheon