Gwen Bradforth

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Recent 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, JavaScript, Swift, HTML/CSS, SQL, Dart, English, Japanese (N4)
- **Frameworks:** Flutter, Django, Flask, React.js
- **Developer Tools:** GitHub, Android Studio, Xcode, Docker, Visual Studio Suite, Google Cloud Platform, AWS Cloud
- **Libraries**: Tensorflow, PyTorch, Pandas, NumPy, OpenCV

WORK & RESEARCH EXPERIENCE

CURVE Fellowship May 2023 - May 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 software involving the Tobii Lab SDK to perform eye-tracking data collection, deployed in study
- 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 June 2023 - December 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 June 2022 - August 2022
Cancer Research UK Cambridge, UK

- Collaborated daily with graduate students in lab of Professor Sarah Bohndiek
- Developed frontend web-based 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 live updates inspired by Google Docs
- 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