Lauren Kung

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Education

- **Carnegie Mellon University** — Pittsburgh, PA
  B.S in Computer Science and Arts; QPA: 3.68/4.0 — *Dec 2023*

Selected Skills

- **Languages**: Python, Java, Javascript, C, SML
- **Technologies**: Git, Linux, Unity (C# scripting), Observable (JS), Arduino (C++), Ren'Py (Python)
- **Art & Design**: Figma, Photoshop, Illustrator, p5.js, Premiere, UX research, illustration
- **Coursework**: Introduction to Computer Systems, Principles of Imperative Computation, Parallel and Sequential Data Structures and Algorithms, Functional Programming, Concepts of Mathematics, Matrices and Linear Transformations, Cognitive Robotics, Interactivity and Computation, Human-Robot Interaction, Space Robotics

Experience

- **Amazon Web Services** — Seattle, WA
  Software Development Engineer Intern - DynamoDB — *May 2022 - Aug 2022*
  - Improved customer experience by emitting percentile statistics for metrics that DynamoDB sends to Amazon CloudWatch - one of the top 20 Product Feature Requests for DynamoDB at the time.
  - Developed solution using an algorithm for efficient data aggregation; integrated solution with existing architecture for metric aggregation during a collection period.
  - Managed package dependencies and built packages to run on a distributed system.

- **Biomotivate** — Pittsburgh, PA
  Data Visualization Intern — *Mar 2021 - Aug 2021*
  - Visualized physiological and behavioral information for Biomotivate, a startup that works to predict and prevent addiction using advanced wearable devices and pattern-detection machine learning algorithms.
  - Contributed to a prototype for a web dashboard for mental health and addiction treatment staff members.
  - Adapted designs of the dashboard in Figma with feedback from treatment center staff members and developed prototype in Observable with d3.js library and Javascript/HTML code.

- **Indeed For Labs** — Pittsburgh, PA
  Product Designer — *Jun 2021 - Aug 2021*
  - Conducted user research and journey mapping for the customer discovery process for Indeed For Labs, a platform that aims to connect students with professional opportunities in research and academia.

Projects

- **Malloc Implementation**: Designed and implemented a dynamic memory allocator which supports several standard C library calls such as malloc, calloc, realloc, free. Utilized explicit and segregated lists, elimination of footers for allocated blocks, and other optimization techniques.
- **AR Penguin**: Mobile application of an augmented reality 3D penguin designed to provide a source of comfort for younger users. Penguin model travels in a random circular path in the proximity of the user and moves with different animations based on user speed. Developed with Unity using C# scripting and the ARCore plugin.
- **Colorful Soundscapes Javascript App**: Designed and programmed a web and mobile app leveraging the new Soli radar sensor in the Google Pixel 4 phone. Users use touch-free Soli interactions to interact with soundscapes. UI is a solid color associated with the soundscape currently playing, allowing the phone to be used as a colorful lamp.

Awards and Certifications

- **BXA Small Grant**: Independent study and Internet of Things project funded by CMU BXA Intercollege Degree Programs in 2022.
- **Samuel Rosenberg Award**: Granted by Carnegie Mellon University in 2021.
- **Dean's List**: Spring 2021.