Alice Gao

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EDUCATION

University of Washington

Sep 2021 – Present

PhD in Computer Science & Engineering (MSc recieved Spring 2022)

Seattle, WA

Princeton University

Sep 2017 - Jun 2021

BSE in Computer Science | GPA: 3.73 departmental, 3.58 overall

Princeton, NJ

Research Experience

Research Assistant

Jan 2024 – Present

Wildlab · University of Washington

Seattle, WA

- Training custom neural network to learn embeddings from UI designs, developing full-stack web application to enable UI/UX designers to search for similar designs and design components from different cultures and visualize this integrated into their own
- Developed mixed methods approach investigating cultural differences in IM tool usage between US and Japan
- Developing full-stack web application to return emoji definitions and contextual use cases based on demographics from crowdsourced data

Research Assistant

Sep 2021 – Jan 2024

 $GRAIL \cdot University of Washington$

Seattle, WA

• Researched and developed methods to correct attention and eye gaze by training a neural network for more attentive video conferencing experience

Undergraduate Research Assistant

Sep 2019 – Feb 2021

Princeton Vision & Learning Lab · Princeton University

Princeton, NJ

 Researched and developed methods to improve associative embeddings, which represent pixels in an image, for one-stage object detector

Industry Experience

Tech Intern | Java, Docker

Jun – Aug 2020

Online Account Opening · Capital One

New York, NY

- Created endpoint for new API for Single Sign On (SSO) Enrollment, which was deployed to QA, moving this service out of jBPM so microservices could be better utilized
- Cucumber and Gherkin for endpoint integration, Mockito for unit tests
- Created framework for streaming data platform for new applications creation while opening an account. Ability to be tested locally with Docker
- Deployed new security groups using Nimbus for new SSO Enrollment API for QA and production

AI Design Lab Intern | Python, Flask

Jun – Aug 2019

Tezign

Shanghai, China

- Assisted in optimizing image retrieval to match similar designs and contributed in pipeline to help train a model in judging good vs bad graphic design.
- Used Flask for company's backend and API for company-specific cloud-based file system

Technical & App Development Intern | Switft, Fusion 360

Jun – Aug 2018

 $Princeton\ Satellite\ Systems$

Princeton, NJ

- Devised scene graph gameplay and developed method to render text to keep score in OpenGL/GLKit for spacecraft simulation iOS app
- Created 3D models for Phase II version of Direct Fusion Drive (DFD), a direct-drive, fusion-powered rocket engine that can generate controllable power from 1-10 MW

TECHNICAL SKILLS

Languages: Python, R, SQL, TypeScript, JavaScript, C, Go

Frameworks: PyTorch, scikit-learn, ReactJS, Svelte, Node.js, Django/DRF, Flask

Tools: Docker, Apptainer