Lucy Zhu

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Education

Stanford University 2017-21
BS in Computer Science
GPA: 3.712

Skills

CS: Python, Java, C++, HTML/CSS, Javascript, ReactJS, React Native, NodeJS, MongoDB, Swift, SwiftUI, SQL/MySQL, Firebase, JPQL

Design: Figma, Unity, Adobe Photoshop, Premiere Pro, Indesign

Relevant Courses

- Data Management and Data Systems
- Object-Oriented Systems Design
- Cross-Platform Mobile Development
- Web Applications
- Design and Analysis of Algorithms
- Human-Computer Interaction Design
- Game Design
- Computer Organization and Systems
- Interactive Computer Graphics

Work Experience

Program Designer – St. Louis County PD *(July 2021-present)*
- utilized Java, Javascript, HTML/CSS, Primefaces, XHTML/XML, JPQL, and SQL to prototype, develop, and augment web applications

Fullstack Engineer – Sylphi, Inc. *(June 2021-December 2021)*
- app development using Swift/SwiftUI front-end with Firebase Cloud back-end

Software Development Intern – Sigmaways *(Summer 2020)*
- prototyped a Vyze web application used to develop and manage their demo pages using a combination of ReactJS, HTML/CSS, and DynamoDB on AWS

Software Developer – Stanford University *(Summer 2020)*
- development on web applications using Django, HTML/CSS, and Vue.js ranging from implementing search system for software installed in machines to developing additional features to the internal Kanban board web app for staff quality of life improvements

Research Intern – Stanford Vision/AI Department *(Summer 2019)*
- worked under Prof. Leonidas J Guibas to research about application of deep learning towards analyzing 3D models
- designed and implemented a pioneering CNN in Python to count semantic part types and parts of 3D point cloud models
- demonstrated the feasibility of solving the counting problem given the appropriate part labels with a peak accuracy of 95.7%

Programmer – Virtual Human Interaction Lab *(Sept 2018 – June 2019)*
- led the logic and workflow for integrating videos into 1000 Cuts, a simulation about the effects of racial discrimination
- cooperated in a team to implement the cross-platform structure of 1000 Cuts from Unity to Unreal
- wrote C++ and C# scripts to implement interactivity within simulations including avatar movement and object manipulation

Image Developer – Stanford University *(June 2018 – Dec 2018)*
- wrote Python scripts ranging from bash aliases to running multiple processes that sped up workflow towards deploying the OS image
- responsibilities included delivering the project in a fast-paced environment while working with remote machines and a ticketing system to fulfill numerous daily computer issues

Digital Artist/Illustrator *(2013 – present)*
- managed several art accounts and maintained a storefront for my artworks - HAIKU

Projects

Chicago Taxi DB – Data Management & Systems Project
- analyzed the Chicago taxi database via BigQuery (Google Cloud) and wrote Python (matplotlib), and SQL on Google Colaboratory
- trained a machine learning model on predicting optimal factors to maximize profits

Villainous Contraptions – game design project
- try the game out or read about the process!
- programmed the inventory interaction and the visual hint system in C# on Unity
- designed and drew the character sprites for dialogue interactions with Aesprite

Computer Graphics and Imaging – 3 projects for Computer Graphics courses
- made it into top 10 images of class and so had my project displayed on the class website: CS148 2018 Showcase
- utilized OpenGL, pbrt, raytracing, C++ in Visual Studio to create computer-generated images