

ANGELA ZHANG

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angelaz1

in angelaz122

angelaz1.github.io

US Citizen

WORK EXPERIENCE

Summer SWE Intern - Player Services Team

Microsoft Xbox Remote

Jun '21 - Aug '21

- Designed and implemented an IP Geolocation **Kubernetes** service for PlayFab, a backend platform hosting over **2.5 billion** player accounts for **5000** games, to provide player location information to game developers
- Developed an automated **GitHub Action** to perform weekly updates of database files from a Cosmos Virtual Cluster
- Worked extensively with **Terraform**, **FluxCD** and **Azure Resources** to integrate service into existing PlayFab Kubernetes clusters and create a shareable package for other teams across Microsoft

Summer SWE Intern - Data Services Team

Microsoft Xbox Remote

Jun '20 - Aug '20

- Constructed a design document and fully implemented a data migration metadata class in **C#** for PlayFab
- Directly interacted with **CosmosDB** and **DynamoDB** database systems in implementing and testing migration

Summer Intern

SeisWave Houston, TX

Jun '19 - Aug '19

- Developed model-building algorithms in **C** to automate velocity picking with seismic data retrieved from CDP-offset gathers, improving overall accuracy and efficiency from industry-standard methods
- Employed various algorithmic techniques and economics concepts such as **Monte Carlo algorithms**, **genetic algorithms**, and Gini coefficients

15-122 Lead Teaching Assistant

Carnegie Mellon University Pittsburgh, PA

Jan '19 - Present

- Instructs an introductory imperative programming course in **C** with an average of **500** students each semester
- Directly manages a staff of over **40** teaching assistants

PROJECTS

Bigger, Badder, Buggier

Web Game - UI + Gameplay Programmer

Jan '21 - May '21

- Worked with an interdisciplinary team of 20 to create a **Unity** game to capture the spirit of CMU Buggy Racing during the remote semester
- Implemented CPU buggies using Unity's built-in **NavMesh** system and added heuristics for a more engaging racing experience, such as rubber-banding speeds and interacting with items

C0 VSCode Language Support

VSCode Extension - Programmer

Nov '19 - Jan '20

- Designed and released a VSCode extension in **TypeScript** with a team of four other teaching assistants currently used by over **2800** students
- Improved the efficiency and understanding of student coding through providing language support features including auto-completion, syntax highlighting, and go-to

EDUCATION

B.S. in Computer Science

Minor in Game Design

Carnegie Mellon University

May 2022

GPA: 3.91/4.00

M.S. in Entertainment Technology

Entertainment Technology Center

May 2023

ACADEMICS

Operating Systems

Game Development

Software Development

Algorithm Design

Parallel and Sequential Algorithms

Functional Programming

Data Structures

Imperative Programming

Linear Algebra

Discrete Mathematics

3D Calculus

Probability

Logic

TECHNICAL SKILLS

C#

C

Java

Python

JavaScript

TypeScript

HTML

CSS

Unity

Kubernetes

Docker

Git

GameMaker Studio 2

LEADERSHIP/SERVICE

ARCC - Chinese Culture Club

Secretary, Art Board Leader, Producer

Organizes events for hundreds of students to promote Chinese culture through food, dance, and an annual large-scale theatre performance

KPDC - K-Pop Dance Club

Showcase Board Member

Plans semesterly dance showcase consisting of 20 subunits to hundreds of students

CAP - Animal Shelter

Volunteer

Cared for hundreds of animals in shelter and over-saw monthly adoption events