KEVIN HUANG

 ■ 3937 Nobel Dr 142 San Diego, CA 92122 github.com/Origamijr % origamijr.github.io

EDUCATION

M.S. Computer Science University of California San Diego

m Sept 2020 - June 2021

- MS/BS with emphasis on Machine Learning
- Coursework: VLSI CAD, Parallel Computation, NLP, Learning Algorithms, Neural Networks, Complexity Theory, Convex Optimizations, Cryptography, Logic

B.S. Computer Science University of California San Diego

🛗 Sept 2016 - June 2020

- Double minor in Mathematics and Music Computing & Arts
- Total GPA: 3.918 Major GPA: 4.0
- Major Coursework: Data Structures, Algorithms, Theory of Computability, Cryptography, Programming Languages, Digital Systems, Computer Architecture, Operating Systems, Software Systems, Probabilistic Reasoning, NLP, Image Processing, Computer Graphics, Computer Animation, Software Engineering

EXPERIENCE

Computer Science TA University of California San Diego

September 2020 - March 2021

- Teaching Assistant for Computer Graphics in Fall 2020, and Computer Animation in Winter 2021
- Responsibilities include preparing for discussion sections, holding office hours, and grading
- Position held in a remote environment

Computer Science Tutor University of California San Diego

April 2018 - March 2020

- Worked as undergraduate tutor for the CSE department for 7 quarters and 2 summer sessions
- Responsibilities include holding lab/office hours, grading homeworks and tests, and helping communicate course content to students
- Topics tutored: Discrete Math, Digital Systems Lab, and Computer Graphics

Intern

Webroot Cybersecurity

- Summer internship working with a small team of 4 peers to revamp a DNSP agent distribution portal from scratch
- Used an Angular front-end with a Node.js back-end connected to a MySql database

INTERESTS

- Computer Music: Music Information Retrieval, Generative Models
- Computer Graphics: Real-time rendering,
 Virtual Reality, Procedural Modeling

SOFTWARE SKILLS

Ordered by decreasing familiarity

- Languages: C++, Python, C#, C, Java, Javascript, Verilog, F#
- Technologies: Unity, Blender, OpenGL, Pure Data, MaxMSP, Angular, Ableton

PROJECTS

Cyber City

- 2v2 tower defense game, created in team of 6
- Written in C++ using The Forge (opensource rendering framework)

Klatt Voice Synthesizer

₩ Winter 2020

- MIDI controllable source-filter voice synthesizer, with real-time queueable phonemes
- Built for STM32F4 microprocessor written in C, and prototyped with Pure Data

Virtual Environments

Fall 2019

- Collection of Virtual Reality environments
- Built with Unity SteamVR with support for Oculus and Windows MR using C# and Cg

Spatial Visualization

Spring 2018

- Virtual Reality collaborative research project, developing spatial reasoning trainer
- Written in C++ using in-house rendering framework

Long-term Personal Projects

MusicFun

Python application using pyo, librosa, and OpenGL to interface and process Audio/MIDI data

Discord Bots

Collection of amusing chat bots written in various languages