Nicholas Jennings

Linkedin: www.linkedin.com/in/nicholasjohnjennings | (760) 672-9289 | nicholasjennings@berkeley.edu
Personal Website: nicholasjj.github.io

EDUCATION

University of California, Berkeley

B.A. Computer Science, Applied Mathematics 2019 - 2023 (GPA: 3.97)

M.S. Electrical Engineering & Computer Science 2023 - 2024 (GPA: 4.0)

Notable Classes: Human Computer Interaction, Data Structures, Computer Architecture, Probability, Numerical Analysis, Algorithms, Artificial Intelligence, Cryptography, Real/Complex Analysis, Computer Graphics.

RELEVANT EXPERIENCE

Amazon (AWS) **Seattle, WA**

SWE Intern May - Aug 2023

- Designed and implemented a gamification extension to an internal iOS application, with a native AWS REST service as a backend.

SWE Intern May - Aug 2022

- Designed and implemented a service which used AWS services to send scheduled notifications to specified subsets of mobile app customers.
- Designed the service for easy integration with future tools, and documented how these extensions should be implemented.

University of California, Berkeley **Berkeley, California**

Undergraduate Research Assistant, Mentors: James Smith, Prof. Bjoern Hartmann Sep 2021- May 2023

- Jennings, N., Nandy, A., Zhu, X., Wang, Y., Sui, F., Smith, J., & Hartmann, B. (2022). GeneratiVR: Spatial interactions in virtual reality to explore generative design spaces. CHI Conference on Human Factors in Computing Systems Extended Abstracts. https://doi.org/10.1145/3491101.3519616
- Created a Virtual Reality based sorting tool for use in Generative Design workflows
- Designed novel spatial interactions for filtering a parametric design space

Undergraduate Research Assistant, BLUES Mentor: Eleonora Losiouk Sep 2021- Present

- Conducted a review of prior work to create a taxonomy of known virtualization-based malwares and attacks for Android
- Built Gradle scripts for virtualizing malwares and assessing their detectability by commercial antivirus apps. Used Bash, Gradle, and Python scripts to create an semi-automated system for identifying virtualization-based malwares from virus databases, allowing for more in-depth analysis

California State University, San Marcos **San Marcos, CA**

Computer Science Intern Jan - Mar 2019

- Aided in a qualitative study on alternate methods of computer file structure representation
- Used the Unity Engine to create a three-dimensional file visualization system compatible with GitHub

PROJECTS

Firework Simulation (HLSL, C#, Unity) **Link**

- Custom firework/smoke simulation and renderer

ASCII graphics renderer (C++) **Github Link**

- First person camera / controller using ASCII characters, runnable in terminal

Raymarcher Kaleidoscope (HLSL, C#, Unity) **Github Link**

- Raymarch shader for Unity, designed to take input from standard unity gameobjects for easy manipulation

ADDITIONAL SKILLS

- Java/C#
- C/C++
- Python
- AWS
- HTML/CSS/JS
- Github