

Daniel He

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EDUCATION

University of California, Berkeley Class of 2023

GPA: 3.529

Bachelor's in Computer Science, Minor in Data Science

- Relevant Coursework: Structure and Interpretation of Computer Programs, Data Structures & Algorithms, Designing Information Devices & Systems, Discrete Mathematics & Probability Theory, Foundations of Data Science, Machine Structures, Intro to AI, Principles & Techniques of Data Science, Immersive Computing and Virtual Reality, Computer Graphics, Efficient Algorithms and Intractable Problems, Human Contexts and Ethics of Data

EXPERIENCE

Extended Reality @ Berkeley (XR@B)

June 2020 - Present

Education Executive (Fall 2020) | President (Fall 2021)

- President of Extended Reality @ Berkeley, the largest project-based tech club on the Berkeley campus, and one of the largest student VR/AR organizations in the nation
- Oversee the executive team to manage 60+ student developers across a dozen technical projects.
- Manage multiple projects which includes the XR DeCal, VR/AR Education workshops across campus, and several other projects.
- Teach technical workshops for new club members, and for campus events like CalHacks, on XR, Unity, and C#.

Extended Reality Development Course Facilitator (XR DeCal)

January 2020 - Present

Virtual/Augmented Reality Lead Course Facilitator

- Lead facilitator for the student-run XR course, teaching VR/AR development, history, and design principles.
- Teach lectures, create lecture content, develop lab curriculum, grade homeworks & labs, and manage communication through Piazza and the course email.
- Developed a new lab sequence for the XR DeCal for the remote semester, focusing on augmented reality development using Unity's AR Foundation for mobile devices.

UC Berkeley EECS/Data Science

September 2020 - May 2021

Academic Intern

- Assist the TAs & Professors during labs and office hours in teaching the material of each class and answering questions that students have in CS 61B (Data Structures & Algorithms) & Data 8 (Foundations of Data Science).

Virtual Bauer Wurster (UCB College of Engineering and Design - XRLab)

January 2021 - Present

Student Researcher, Web & Unity Developer

- Developer on Virtual Bauer Wurster, a collaborative virtual experience made in Unity, where hundreds of students post their architectural design work and interact with others inside their own 3D architecture models
- Development of in-app custom editor that uses AWS, for users to efficiently create, edit, and upload their architectural models for showcases in the app, at 3x faster than the original workflow
- Built the landing webpage for the application where hundreds of users visit weekly, and built various other webpages for exhibitions/showcases in Virtual Bauer Wurster.

PROJECTS

- **Camping VR:** Virtual Reality relaxing camping simulator developed in Unity with dozens of various interactive tasks to complete around the campsite.
- **Shoot-the-Block:** AR mobile game made in Unity, similar to the arcade game Whack-a-Mole!
- **TutoriVR:** Created Unity Toolkit for easy in-environment recording and playback of design tutorial videos in VR. Has 3D stroke reconstruction feature that playbacks strokes the recorder made in 3D space. Plans to be implemented in OpenBrush.

TECHNICAL SKILLS

- **Languages:** Java, Python, C, C#, HTML/CSS, Git, SQL, Scheme, C++, JavaScript, Assembly Language
- **Technologies:** Unity, Unreal Engine, Git, LaTeX, NumPy, JUnit, Autodesk Maya, Bootstrap, Android Studio, OpenCV, scikit-learn, Pandas, Matplotlib, Seaborn
- **Other:** Mandarin, French (Conversational)

ACHIEVEMENTS

- **CodeDay LA - Best in Show Award (2018):** Received award out of hundreds of attendees. Developed a card/deck system in Unity with mechanics to draw the cards and place down cards in a playing field.