Sara Hanson

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OBJECTIVE

Obtain a fellowship where I can apply my research experience, develop innovative applications, and delve into new and cutting-edge technologies through innovation and research.

EDUCATION

University of Southern California, Los Angeles, CA
Viterbi School of Engineering (Graduation: May 2021)
Bachelor of Science, Computer Science Games
Presidential Scholar, W.V.T Rusch Engineering Honors Student, Aaron Cheney Scholar
GPA: 3.962 (4.0 scale)

TECHNICAL SKILLS / RELEVANT COURSEWORK

Advanced: C++, Unity3D, VR development - GearVR, Oculus Go, Oculus Rift, HTC Vive
Intermediate: Java, C#, Python, JavaScript; **Beginner:** TensorFlow, Unreal Engine 4

WORK EXPERIENCE

Emblematic Group, Santa Monica, CA
Intern (October 2018 - Present)
- Developing professional virtual reality applications by integrating machine learning and Unity
- Communicating with developers at Google AI, Tensorflow, and Unity to develop innovative solutions to virtual reality issues

Vanderbilt University School of Engineering, Nashville, TN
Learning in Virtual Environments Lab, Researcher (May 2018 - Present)
- First author, "Improving Walking in Place Methods with Individualization and Deep Networks"
- Built TF convolutional neural network to identify human movement and integrated into Unity
- Developed eight groundbreaking walking-in-place algorithms for the GearVR S8 and Oculus Go

Vanderbilt University School of Engineering, Nashville, TN
Learning in Virtual Environments Lab, Research Assistant (Summer 2017)
- Programmed and implemented resetting for virtual Tübingen in the HTC Vive using Unity 3D, C#
- Developed a Tilt Brush environment for schizophrenia research in conjunction with Psychology Dept.

PROJECTS

Beatcaster Advanced Game Project, Game Developer (Summer 2018 - Present)
- Game developer for USC Beatcaster AGP with a focus on gameplay
- Developed a reactive enemy system that adapts in real-time to music input

Charles John Quarto Website, Full Stack Developer (Summer 2018 - Present)
- Independently contracted full-stack developer for RCA poet-songwriter Charles John Quarto
- Built full website from the ground up, including front-end (Bootstrap, JQuery) and back-end (Node.js)

ACTIVITIES

Inter-Collegiate Mixed Reality organization, President (Fall 2018 - Present)
- President of the ICXR, the nation's premier augmented, virtual, and mixed reality organization
- Develop and execute strategies to connect the ICXR community, spanning 20 schools nationwide
- Lead the executive board in organizational development, communication, and expansion

XRSC, University of Southern California (Fall 2017 - Present)
- Head of Communications and Branding for Virtual Reality at USC (VRSC)
- Built a curriculum for teaching Unity for VR/AR development with an emphasis on games

CAIS++, University of Southern California (Fall 2018 - Present)
- Center for AI in Society member, building on AI knowledge through curriculum and social good projects

KXSC Student Radio, University of Southern California (Fall 2017 - Present)
- *Steely Dan Fan Club* host - DJ for weekly yacht rock radio show