Sonia Grunwald

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EDUCATION

BA Computer Science, Studio Art — Claremont, CA | May 2018
Pomona College
Cum Laude, 3.83 GPA

EXPERIENCE

MICROSOFT HOLOLENS | Software Engineer II — Seattle, WA | April 2021 – Present

- Designed and developed holographic content pairing novel 3D visualizations of geospatial and temporal data with storytelling narratives to create a marine science documentary series airing 2023 on Disney+ in partnership with OceanX, National Geographic, BBC, and James Cameron (Unity, C#, HLSL).
- Adapted work from the series into a real-time collaborative tool, currently deployed on the OceanXplorer research vessel.
- Overhauled existing device management and data ingestion services into a single web application. Designed and implemented the associated REST endpoints to serve live information to our interactive data visualizer (Angular, ASP.NET).
- Promoted to leadership role in location-based experiences, partnering with Flying Fish Exhibits and museums worldwide to create a 5-year travelling mixed reality installation highlighting marine research.
- Authored and presented demonstrations and product showcases for high-level potential partners and internal stakeholders.

THE WALT DISNEY COMPANY | Full-Stack Software Engineer — Glendale, CA | June 2018 - March 2021

- Designed and developed two new applications in Disney's Asset Management ecosystem, managing title and data input metadata. Independently designed and implemented the UI of both applications and integration points (React, Redux, Node.js).
- Developed and improved transfer capabilities to support folder management (HTTP transfer, Amazon S3, IBM Aspera).
- Independently built custom ingestion, back-end, and UI support for industry-standard IMF files.

CLAREMONT GAME LAB | Lead Software Engineer, Lead Technical Artist — Claremont, CA | March 2017 - May 2018

- Managed engineering development and production of a novel video conferencing augmented reality project (Microsoft Kinect, RoomAlive). Authored and presented product showcases to six potential investors.
- Led a team of student artists and developers to create innovative and unique game environments (Blender).

MICHAEL GREENBERG, PHD | Research Assistant — Claremont, CA | June 2017 - August 2017

- Led research, development, and production of an Android application designed to control a CNC router to carve custom works of art in wood (Java, Android Studio).
- Wrote a compiler to support the translation of gestures and controller inputs into specialized machine code.

INST FOR CREATIVE TECHNOLOGIES, USC | Mixed Reality Research Intern — Los Angeles, CA | June 2016 - August 2016

- Awarded NSF Research Experience for Undergraduates fellowship.
- Pioneered the ability to automatically rig and animate virtual human 3D models using real-time motion capture data (Unity, C#).
- Developed and executed human-computer interaction user studies for the Oculus Rift. Results were presented at the International Conference on Artificial Reality and Telexistence and Eurographics Symposium on Virtual Environments.

SKILLS

Languages: C#, Javascript, Java, ASP.NET, ReactJS, Redux, NodeJS, Angular, HLSL, Python, C, LaTeX, CSS, HTML
Tools: Unity, Git, Visual Studio, Insomnia / Postman, MongoDB / Mongoose, Azure DevOps, IBM Aspera, AWS, Mocha / Chai / Jest Unit Testing Frameworks, Blender, Illustrator, Photoshop, After Effects, Procreate
Professional: Agile development, Scrum/Kanban, Project Management, Collaboration, Written / Oral / Visual Presentation

AWARDS AND PROJECTS

PEOPLE'S CHOICE AWARD | 2017 Claremont Colleges Hackathon — Unity, C#, Oculus, Leap Motion

- Created a VR game in which the user navigates the environment using their hands as input to avoid AI-driven enemies.

BEST GAME DESIGN | 2016 Claremont Colleges Hackathon — Unity, C#, Blender, Photoshop

- Created a procedurally-generated 3D game, enabling infinite flight in an interactive environment with AI-driven combatants.
- Produced all 3D models, materials, and textures for the game.