

EDUCATION

Bachelor of Science in Computer Science, Santa Clara University (2020)
Bachelor of Arts in Philosophy, Santa Clara University (2020)

WORK EXPERIENCE

Virtual Reality Developer and Head Lab Assistant

Santa Clara University, Imaginarium • September 2017 – June 2020

- Collaborated with various departments to create educational virtual reality experiences used by faculty in their classes to enhance students' learning
- As head lab assistant, worked directly with students to teach them how to develop their own virtual reality projects, many of which were also used by faculty

Researcher and Graphic Designer

Aromyx Corporation • September 2019 – April 2020

- Researched for and developed 2D assets for the company's app, which aims to better understand olfactory data and its effects on consumer preferences
- Graphics modernized and simplified the app, thus increasing downloads and providing Aromyx with olfactory data from a broader range of users

Virtual Reality Independent Contractor

Gift of Life Marrow Registry • June 2019 – September 2019

- Created a VR simulation that immerses viewers in a 360 video and animation of a stem cell donation process, required for patients with leukemia and other blood-borne illnesses
- Developed to educate potential donors and alleviate their fears, aVResis has helped Gift of Life convinced more people to join their registry, potentially saving someone's life

Peer Educator for Professor Takeshi Moro

SCU, Art & Art History Department • January 2019 – March 2019

- Peer Educated for a course in which students volunteered at Yu-Ai-Kai Japanese senior home in San Jose, CA. Students fostered relationships with the seniors and eventually interviewed them to learn their stories and share them through VR
- Seniors were given a platform to share their stories with the world, and students received experience in creating a cohesive virtual reality experience

Service and Social Justice Coordinator

SCU, Christian Life Community Club • September 2017 – June 2018

- Coordinated all club volunteers and service events, including weekly after-school tutoring at Luther Burbank School in San Jose, CA, and working with Vinnies Santa Clara to make sandwiches for the for hundreds of underserved residents

Information Technology Summer Intern

Gift of Life Marrow Registry • June 2017 – August 2017

- Assisted IT department with the day-to-day operations of network infrastructure maintenance. Researched and troubleshooted issues with Windows 10 desktops, Server 2012 R2, and network connectivity. Also assisted in creating virtual machines within a Hyper-V environment and the setup of new users within Active Directory. Some of the tools used include, but are not limited to, Hyper-V Management console, Event Viewer, DOS, and VNC

WEBSITE

nvanmaerssen.com

CONTACT

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SOFTWARE

Wireframe CC
Figma/Sketch
Adobe Photoshop, Illustrator, and Premiere
Substance Designer
Substance Painter
Unity
Autodesk Maya
Github/Git Bash
OpenGL
C#, C++, HTML, CSS, and JavaScript

SKILLS

UI/UX design
Graphic design
Creating enhanced visuals
VR development
Oculus Rift, Rift S, and Quest
Fluent in Spanish, English, and French
Environment design
Particle Effects/VFX
3D Modeling
UV unwrapping
Creating and applying textures to 3D models

PROJECTS

Website

January 2020 – May 2020

- Designed and created nvanmaerssen.com website portfolio from the ground up with Figma, HTML, CSS, and JavaScript

VERSE

SCU, Imaginarium and English Department • January 2019 – June 2020

- VERSE, the Virtual English Renaissance Stage Experience, is a virtual reality tour through an accurate 3D architectural model of an Elizabethan theater. The project is used in the university's English department in presentations and various Shakespeare courses to place students in a theater like the ones they study, thus helping them better understand their size and layout
- 3D model made with Maya, textures with Substance Designer and Substance Painter, and project run in Unity

aVResis

Gift of Life Marrow Registry • June 2019 – September 2019

- This virtual reality experience takes users through a full apheresis stem cell donation, including a tour of the donation center (360 video) and an animated roller-coaster like ride through a 3D modeled apheresis machine
- The goal of aVResis is to alleviate potential donors' fears to increase the likelihood they'll join the registry, which matches donors with patients in need. Many people fear stem cell donations because they don't fully understand the process, so this simulation was created to better explain what actually happens in a donation
- Video filmed with Gear 360, models made in Autodesk Maya, and project compiled in Unity

TAVRN

September 2017 – June 2018

- Created a medieval wizarding game in virtual reality in collaboration with three other students. The game received first place in the *Imagine That!* competition for its innovative 3D menu and now has over 2,300 downloads on the Oculus store
- One of the main goals with TAVRN was to create an innovative 3D menu. 2D sprites work well with 2D games, but in a 3D environment, they oftentimes break immersion. So, we created our interactive tavern, which serves as a much more intuitive menu for a virtual reality setting
- Responsible for designing the tavern, all particle effects and environments, lighting, and some scripting

Offworld

January 2019 – June 2019

- Worked with seven other students to develop a virtual reality cyberpunk space-racer game, aimed at balancing movement in a VR headset with lack of movement outside of the headset to avoid motion-sickness
- Primarily responsible for 3D modeling the ships users could choose from, texturing them, texturing the stars and planets, creating the environment, and all particle effects

Trivial Pursuit

April 2018 – June 2018

- Collaborated with two other students to make this short film about bullying awareness
- 3D modeled main character and one bandit (both robots), created terrain and lighting, scripted scene manager and cut audio in Audacity to fit scenes properly. Also made the title, black out, and credits scenes, and helped with camera animations in some of the other scenes

Taiko San Jose

April 2018 – June 2018

- Interviewed Taiko group in San Jose with two other students to learn more about the history of Taiko in the US, and to create a virtual reality experience that would digitally share Taiko's story
- Primarily responsible for filming the 360 videos and tying them together into a cohesive Unity project

Flame Runner

June 2018 – July 2018

- Created a 2D maze runner with ten different levels and multiple obstacles (e.g. flames that weaken/strengthen your light, spontaneous showers that dim your light, etc)
- User plays as a small flame and needs to find the end of the maze before their light runs out

AWARDS

Benjamin A. Gilman International Scholarship

August 2018

- Awarded this nationally competitive scholarship to study computer science and philosophy at the Vrije Universiteit in Amsterdam during the 2018 fall semester
- The Gilman Scholarship is congressionally funded and sponsored by the Bureau of Educational and Cultural Affairs at the U.S. Department of State, and administered by the Institute of International Education

First place in “Imagine That!” contest for TAVRN

June 2018

- Students were given one academic year to develop a virtual reality experience in teams of four. Our project, TAVRN, won first place for its beautiful environments, excellence in design, and creativity