Ashley Dattalo

Education

California Polytechnic State University
(San Luis Obispo)
BS Computer Science Dec 2018

Github: ashleydattalo   **LinkedIn:** Ashley Dattalo
Languages: C, Java, C++, OpenGL   **Skills:** Unity
Hobbies: Kayaking, Hiking, Reading, Soccer, Painting

Work Experience

Microsoft | Software Engineering Intern   June 2018 – September 2018
- Figured out a way to incorporate Virtual Reality into IT software

Microsoft | Software Engineering Intern   June 2017 – September 2017
- Worked on the SCCM team

Godaddy | Software Engineering Intern   June 2016 – September 2016
- Worked on the Internal Tools team
- Used Javascript and HTML

MarkLogic Corporation | Software Engineering Intern   June 2015 – September 2015
- Created website to visualize graphical data
- Used HTML, CSS, d3, Javascript, and jQuery

Projects

Galaxy Collision in Virtual Reality
- Built a simulation of two galaxies colliding
- Enabled user to add stars and black holes into the simulation
- Used Unity

2D Fluid Solver Simulation
- Created a renderer for Jos Stam's fluid solver algorithm
- Built using OpenGL and C++

Solar System Simulation
- Shows the Earth, Jupiter, Mars, space stations, and meteors orbiting the sun
- Built using OpenGL and C++

2048
- Built my own version of the game 2048 (in Java)
- Created a colorful UI to play the game

Particle System Simulation
- Rendered 1,000,000 particles to screen per frame
- Used Transform Feedback to allow particle data to stay on the GPU increasing performance

Motion Sensor Light Bulb Project
- Used a Raspberry Pi, motion sensors, and a smart light bulb
- Built a website to control the state of the light

L-Tree Generation Game
- Created a world with multiple mathematically generated L System Trees
- Implemented using OpenGL and C++

Chess
- Built a Java UI to play the game

Android App Development
- Built a motivation workout app

Publications

- Interactive Large Structure N-Body Gravity Simulation for Immersive Learning in Virtual Reality Ashley Dattalo, Irene Humer, Mila Tahai, Krzysztof, Shinjiro Sueda, Christian Eckhardt *Immersive Learning Research Network.* 1-16, Missoula, MT, June 24-29, 2018.

Service

Women Involved in Software and Hardware

<u>President</u>   (June 2017 - June 2018)
- In charge of an organization that had 200 members and 80 events per year
- Lead a team of 25 officers to ensure the club ran smoothly

<u>Community Outreach Director</u>   (September 2014 – June 2017)
- Responsible for organizing:
  - A 6 week program to teach 2nd graders how to code
  - A day-long event to teach 150 high students about computer science
  - Multiple high school visits to promote Computer Science