Jacqueline Allex

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EDUCATION

Northeastern University, Khoury College of Computer Sciences **Boston, MA**
Candidate for Bachelor of Science in Computer Science and Media Arts May 2022
GPA: **3.75** / 4.0 (Dean's List Placement for Academic Excellence)
Coursework: Object Oriented Programming, Animation, Algorithms, Linear Algebra, Discrete Structures
Activities: Girls Who Code, Northeastern University Women in Technology, Animation Club

SKILLS

Programming : C++, Python, Javascript, ReactJS, SQL, C#, Java, HTML5, CSS, Git, Agile
Software Proficiencies : Maya, Blender, Nuke, Houdini, Unity, Adobe Photoshop, After Effects

WORK EXPERIENCE

Human Movement Neuroscience Lab **Boston, MA**
VR | AR | Motion Capture Technical Engineer January 2020 - Present

- Construct skeleton and create full-body human animations using Python scripting in Blender from parsed data collected through marker and markerless motion capture in lab
- Use computer vision and neural networks software to detect parts of human skeleton and other objects in 2D video and perform 3D reconstruction for markerless mocap system.
- Clean up mocap data via code and create automated system using camera's frustum information, far and near clipping planes, 3D marker data, and RGB video pixel location of markers to label tracked unlabeled marker trajectories.
- Calculate vectors and matrices related to position and rotation quaternions in 3D space, perform calibrations, project rays, manipulate cameras and rigid bodies.

Scout Studio **Boston, MA**
Developer and Design September - January 2020

- Designed UX and implemented UI using React as part of Agile team for website of client NoMix.
- Closely communicated with experienced backend and algorithm developers to provide an intuitive web experience for patients of all backgrounds.

Bank of America **Jersey City, NJ**
Global Technology Analyst Intern June - August 2019

- Collaborated on an Agile team of experienced developers and designers to create new application approaching UAT, Distribute, which facilitates data transfer in Credit Risk.
- Built and designed 10+ features on front-end using React/Redux and Node/Express.
- Wrote functionality in API, implemented tests, participated in code review.

PROJECTS

Raytracer (Personal Project)

- Renders realistic images through ray tracing techniques on 3D scenes.
- Used C++ to implement Vector3 math operations, rays, shaders, lights, geometry in a scene, normal determination, antialiasing, materials with refraction and reflection, and cameras

The Co-op Search. Reinvented
Won 3rd place in IBM's 2019 Husky Hackathon

- Implemented form that uses Sentiment Analysis on text-based answers to evaluate if inputted comments reflect positive/negative sentiment on website allowing students to find ideal Co-op.