Jacqueline Allex

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SKILLS

Programming : Python, PyQt, C++, OpenGL, GLSL, C#, Javascript, Git, Perforce, Agile
DCC Proficiencies : Maya, Blender, Houdini, UE4, Unity, ZBrush, Substance Painter

EXPERIENCE

Electronic Arts   **Los Angeles, CA**
Technical Artist Intern   May - August 2021
- Worked on Battlefield Mobile as a Technical Artist for Industrial Toys; programmed artist-facing tools in Unreal Engine 4, Maya 3D, and general tools such as a Slackbot, primarily using Python, PyQt, and Blueprints Visual Scripting Language. Used Perforce for source control.

ILM, Lucasfilm   **San Francisco, CA**
Core Pipeline Software Engineer Intern   January - May 2021
- Used Python3 to program features in Excavator, a tool for scanning a filesystem for information about what lives on disk and storing that information in elasticsearch for artists and engineers to reference.
- Wrote scripts and debugged farm jobs (Coda), worked using docker and linux.
- Transferred scanned information from redis to kafka, inserted data from kafka into elasticsearch.

Human Movement Neuroscience Lab   **Boston, MA**
VR | AR | Motion Capture Technical Engineer   January 2020 - January 2021
- Constructed skeleton and created full-body human animations using Python, Blender's API, and parsed data collected through marker and markerless motion capture sessions.
- Automated systems to clean up large amounts of mocap data.
- Calculate vectors and matrices related to position and rotation, quaternions in 3D space, perform calibrations, project rays, manipulate cameras and rigid bodies.

Bare Tree Media   **Boston, MA**
Computer Graphics Technical Director (Freelance)   March 2020 - May 2021
- Used Javascript to build components of AR filters such as custom shaders, particle effects, 3D and 2D animations, user interactivity, games, lighting, cameras.

Bank of America   **Jersey City, NJ**
Global Technology Analyst Intern   June - August 2019
- Used ReactJS and NodeJS to design and build 10+ features on the front-end and API.
- Collaborated on an Agile team of experienced developers and designers to create new application approaching UAT, Distribute, which facilitates data transfer in Credit Risk.

EDUCATION

Northeastern University, Khoury College of Computer Sciences   **Boston, MA**
Candidate for Bachelor of Science in Computer Science and Media Arts   December 2022
GPA: 3.8 / 4.0 (Dean's List Placement for Academic Excellence)
Coursework: Computer Graphics, Linear Algebra, Algorithms, Object Oriented Programming, Animation, Game Animation, Character Design, Computer Science Fundamentals I & II

VOLUNTEERING

ACM SIGGRAPH 2021 Student Volunteer

PROJECTS

Mesh Decimation LOD Tool
- Implemented Mesh Decimation tool using vertex split algorithm in C++, including a greedy version for optimization in reducing dense meshes. Investigated ways to improve on existing algorithms.
- Building off of the previous project, created an artist-usable Maya tool, which creates LODs based on a slider with face count. Uses the Half Edge data structure to hold mesh data, and edge collapse as well as vertex split to reduce/add edges to the mesh. Written using Maya's Python API 2.0