

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

Disney Research

Los Angeles, CA

Research and Development Intern

January 2022 - current

- Working on a project developing procedural animation and interactive digital character techniques

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 of data transfer app.

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 and display tool using vertex split algorithm using C++, OpenGL, and SDL, including a greedy version for optimization in reducing dense meshes.
- Created an artist-usable LOD Maya tool using Maya's Python API 2.0 and maya.cmds. Uses the Half Edge data structure, and edge collapse as well as vertex split to reduce/add edges to the mesh