
Technical Skills

Strong: JavaScript, jQuery, HTML/CSS, Angular, React, Node.js, Express, MongoDB, Git, Webpack, Photoshop, Autodesk Maya, Nuke, Functional Programming

Experienced: OAuth, Bootstrap, SASS, Three.js, TDD, WebRTC, OOP, Gulp, Socket.io

Professional Experience

TheCopernicusGame.com - Software Engineer - Multiplayer physics-based game for students 2016 - Present

- Built a reactive and responsive 3D gameplay environment by integrating Three.js with physics Web Workers.
- Created tracking algorithm for Object-Tracker.js to compute only specific pixels from the canvas, improving translation of user actions into game actions, and increasing processing speed by 78%.
- Enabled reliable, instantaneous data transfer using WebRTC data channels and STUN/TURN server technology to ensure a smooth multiplayer experience.
- Wrote tests using Mocha and Chai to ensure players enter the correct room for multiplayer gameplay.
- Deployed on AWS to allow for efficient scaling in response to load events.

Stereo D - 3D Artist - Convert 2D film footage into 3D - (Captain America, Avengers) 2014 - 2015

- Quickly placed characters and objects from 2D footage in the correct 3D depth by calculating exact point color values.
- Worked closely with a team of about 13 artists to deploy the films on time and fix any notes from the director.

WorldWide Fx - Comp Artist - Seamlessly integrate 3D assets with real footage - (Hercules) 2013

- Removed green screen backgrounds from actors and cleaned edge pixelation.
- Tracked and color corrected elements into film footage to produce production ready rendered images.

DAVE School Productions - Full-Stack 3D Artist - Model, texture, rig, animate composite 3D scenes. 2013

- Animated 3-dimensional coordinates at 24 frames per second to produce fluid character animations.
- Implemented a virtual skeleton on characters with custom controllers in order to animate them.

Projects

Easy-RaidFinder - Forum for casual World of Warcraft players to easily find a raid before logging-in to the game.

- Built on Angular.js utilizing OAuth 2.0 to authorize players from the Blizzard game servers.
- Stored players' character data and forum posts on to MongoDB using an Express server.

Packafig - A tool to easily setup Webpack configurations.

- Parsed user input into a working Webpack config file that developers can download and integrate into their projects.
- Designed UI using Angular.js' two-way data binding to translate user input into code as the user configures.

TadPoll - Live polling application that renders poll results in real time.

- Dynamically created websocket channels allowed users to create specific questions for specific audiences.
- Authenticated user accounts using bcrypt's hashing algorithm and stored results in MongoDB database so that users could later retrieve their poll results.

Education

Codesmith - Advanced Software Immersion Program 2016

Dave School - Certificate of Visual Effects and 3D Animation 2012-2013

Interests

Algorithms & Logic Puzzles, Movies, Hiking, Video Games, Family, Game Development