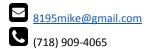
Michael Saunders

Portfolio: mikey.computer





Experience

Lead Front-End Developer

Optiniche

Fall 2019 - Present

- Secured second round of funding by delivering full MVP to stakeholders within the first three months
- Developed entire front-end codebase and established version control standards and coding conventions
- Collaborated with lead back-end developer to design a scalable decoupled solution using React.js and Drupal 8

Co-Founder, Lead Software Engineer

OpusVR

Spring 2018 - Spring 2019

- Developed a VR software service that allows users to create virtual gallery spaces from capturing and uploading art to designing the details of the space
- Led and managed a team of three remote developers and planned weekly sprints
- Delivered user experience through both desktop and VR interfaces, expanding user accessibility
- Implemented a computer vision algorithm* that simplified the translation of real-world art into VR while maintaining artistic detail, allowing inexperienced users to easily upload materials into their virtual galleries

Full-Stack Developer

Freelance Web Development

- <u>ষরের বাইরের আলো (The Light Outside Home)</u> May 2020 Customized OpusVR capabilities to design a browser-based walkable virtual gallery for a Bard MFA thesis exhibit featuring photography and A/V media. The artist was able to showcase their work to hundreds of participants easily with online group walkthroughs and interactive tours (A-Frame, Three.js, WebVR)
- Nova XR Media December 2018 Managed the software and display of 360° VR live streams of New Year's Eve from teams on the ground in Ramallah, Palestine and Tel Aviv, Israel (A-Frame, WebVR, Youtube live streaming)

Co-Founder, Software Engineer

Aint Wet

Spring 2014 - Fall 2019

- Developed and maintained <u>aintwet.nyc</u>, an e-commerce web application that tracks product inventory and processes financial transactions using a "Mongo, Node, and Express" stack
- Processed over \$50,000 worth of sales transactions using PayPal's REST API
- Built a multi-service platform that provides a creative outlet to local youth and art communities in NYC

Projects

- <u>Hack the Solar System</u> **Museum of Natural History (2019)** Developed a pipeline of tools to analyze and visualize the trajectory of comet dust and composition in space following impact. Project team was awarded most innovative solution for approach in processing stacks of raw image data (*OpenCV: C++, Python*)
- *Photometric Stereo Algorithm OpusVR (2019) Utilized simulated annealing to approximate otherwise unknown real-world light positions to compute surface normals (i.e. texture) for use in 3D applications (OpenCV: C++, Python)
- <u>Special Effects</u> **Angels (2018)** Oversaw the photogrammetry capture of live actors for a music video by the musical act "Standing On The Corner" (*Metashape, Blender*)

Languages and Technologies

- JavaScript, C++, Python, PHP, C#, HTML5, CSS3, SQL, GraphQL
- React.js, Three.js, A-Frame, WebGL, OpenCV, Node.js, Express.js, MongoDB, Unity, Git, JIRA, Metashape, Blender, Drupal 8, Django

Education