KAAMIL LOKHANDWALA

WPI Class of 2022 | Computer Science (B.S.) | Interactive Media and Game Development (B.A.) | GPA: 3.87 / 4.0
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TECHNICAL SKILLS

Proficient with …
Unity, Three.js, React, Javascript, WebGL, GLSL, Java

Familiar with …
Python, D3.js, SQL, HLSL, C, MatLab, Maya modeling, animating

EXPERIENCE

Software Developer | *Arista Networks | May 2021 - July 2021*
- Rewrote a proprietary Compiler Explorer fork to use a custom language compiler, which helped **80%** of teams at Arista check code compilation
- Improved an **Sqlite** database querying tool in **Flask** to include a pagination structure
- Transitioned a hashing algorithm from SHA-1 to MD4 to improve compiler caching time by **30%**

Software Intern | *Glucose Trail | June 2020 - July 2020*
- Glucose Trail is a non-profit using an app to facilitate a community driven solution to diabetes
- Developed and debugged **AngularJS**, **Redux** and **RxJS** code of version 2.0 of the Glucose Trail app
- Created a home-page component for the application

Game Programmer and Designer | *Sunburst Studio | March 2020 - August 2020*
- Programmed and designed for *[Sliptime Sleuth](#)*, a time-traveling puzzle game developed in **Unity** and **C#**
- **193** units sold on Steam, and a lifetime revenue of $935 for *Sliptime Sleuth*
- Developed puzzles, **user interaction** and gameplay beats for over 50% of *Sliptime Sleuth's* gameplay experience

PROJECTS

Moonsighted (Unity C#) | September 2021 - December 2021
- Created a **custom markup language** to allow team members to write game dialogue and events like a playwright's script
- Tracked backend game state and added responsive ambient effects with **scriptable objects**
- Automated event-based game tips, using **DoTween** and **TextMeshPro** libraries

Interactive Sketches | (Three.js, Javascript) | October 2021
- Assembled a personal compilation of seven mini, shader-based web interactions
- Wrote glsl shaders that respond and change based off of mouse movement to make original art interactive
- Explored how color data can be processed and transformed into movement

Radial Geometry Shader | (Unity Shadergraph, Unity C#) | November 2021
- Programmed a C# script which generates a specific number of vertices and writes radial angle and vertex type to the color data of each vertex
- Created a shader that reads the vertex color data, radially places vertices and colors the resulting polygons to draw a flower-like geometry
- Animated polygons through a C# script updating the objects' material values over time

Blood Glucose Simulation (Unity C#) | *September 2020 - March 2021*
- Modeled three blood glucose estimation events using medical estimation factors to create an educational blood glucose app
- Created an expandable achievement based badge system to reward players for exploring eat, medicate and exercise events
- Programmed history structure to track player interactions to calculate total "health score"

Remote Music Project (Javascript) | *October 2020 - December 2021*
- Used **Google Firestore** to create a virtual session initialized by a host user, and joined by others via session name
- Shared and updated musical data, such as current bpm and key with band members of a common virtual room
- Tagged each band member with unique musical roles for song's duration

AWARDS

Dean's List (x4)
Hack@WPI's Best Game Award 2020

ACTIVITIES

Meditation Club President, Meditation Leader
Society of Asian Scientists and Engineers (SASE) WPI Chapter Member
Art and Design Club Member