Aryah Kannan

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EDUCATION

Dalhousie University

Sep. 2020 – May 2025

Bachelor of Computer Science, Dean's List

GPA - 3.92/4.30

EXPERIENCE

Student Software Developer | C/C++, Rust, Cmake, Conan

Apr. 2024 – Present

Cartenav Solutions / PAL Aerospace

Halifax, NS

- Worked on a performance critical C++ desktop application to aid in Intelligence and Reconnaissance
- Created a C++ wrapper around a Rust search library, to be able to search through live sensor data
- Designed and implemented a novel feature to allow better target prediction using isochrones

Executive at Dalhousie Interactive GameDev | Unity, Unreal Engine

Sep. 2023 – Present

 $Dalhousie\ University$

Halifax, NS

- Organizing social events to increase awareness and interest in game development on campus
- Attended ISNS meetings to garner interest from the industry
- Organized game jams to help new-comers to game development

Research Assistant | Unity, C++, React.js, PWA

Jul. 2023 – Present

HCI4Good Lab at Dalhousie

Halifax, NS

- Used Intel RealSense depth sensing camera C++ API to study interactions with a large touchscreen display
- Worked in unity to create games for a large public display teaching people about mental health
- Currently working on a project exploring the use of LLMs in diagnosing mental health

Full Stack Developer | React.js, Node.js, MySQL, Apache, Material UI

Jun. 2023 – Present

Dalhousie University

Halifax, NS

- Created a database using MySQL designed to plan the academic timetable
- Used React with Material UI to create drag-and-drop UI
- Integrated with the university's CAS for security

Projects

Graphics Engine $\mid C++, GLSL, OpenGL, Conan, CMake$

Repository

- OpenGL application that can render primitive 3D objects
- Implemented abstraction layers to simplify OpenGL function calls
- Indexed vertex buffers for improved performance
- Can render and composite multiple images

Interactive Public Display Game | Unity, C#, Blender

Repository

- An interactive game hosted on a large touch screen display to teach people about EDIA
- Custom maze generation algorithm to create a hexagonal grid
- Implemented a Finite State Machine pattern and used Scriptable Objects to allow high scalability and modularity
- Worked in a team to create documentation for improved maintainability

Extra curricular

Global Game Jam 2024

Submission

- Date night at Bernie's, a comedic dating simulator game in Unreal Engine 5
- Used blueprints to dynamically manipulate audio to uniquely communicate the game's state
- Won the most creative award at the Halifax game jam site

Brackey's Game Jam 2023.2

Submission

- Hangry Bird, a fun diving bird game made in Unreal Engine 5
- Physics based flying movement and water buoyancy mechanics
- Completed in 7 days with all custom made assets

Ludum-Dare Game Jam 53

Submission

- CaravAmbulance, a chaotic action game centered around being an emergency response driver made in Unity
- Made custom assets using Blender
- Realistic Car physics using Unity's PhysX wheel colliders