Dhruv Warrier

Second year computer engineer excited about creating things and always looking to learn from them. I'm passionate about working with teams, and have experience working in research and in fast-paced, start-up-like environments. I'm capable at front-end web design, and have experience with **C# (Mono, .NET), JavaScript, C++, C, and Verilog.**

dhruvwarrier.github.io github.com/dhruvwarrier/ linkedin.com/in/dhruvwarrier/

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I am looking for an internship that will help me grow with your company.

experience

Founder of Broken Table Studio, indie game team

SEP 2017 - PRESENT

Ø github.com/dhruvwarrier/905

I founded BTS, an indie game team based at University of Toronto with members from Toronto, USA, and India. I actively work on programming and 3D modelling/artwork design. We're working on our first game: **905**. 905 is a game about robots and the Zeroth Law, and is being developed on **UnityEngine in C#/Mono**.

- I developed the movement and animation systems for the enemy robots and the main robot character.
- I designed the objective manager system, a system that stores and keeps track of ingame objectives and actions.
- We have an early playable demo! <u>brokentablestudio.github.io/demo.html</u>. It showcases our 3D modelling design and an early version of the movement/animation systems.

Research Assistant DEC 2017 – JAN 2019

Ø github.com/dhruvwarrier/city-builder

I worked as a research assistant with Dr. Tamer Diraby, creating software tools for civil engineers using insights from Dr. Diraby's research. Our focus was "city-builder", a cross-platform tool that can help civil engineers design roads and cities. I was part of a team of 2 that designed and implemented "city-builder" in **C#/Mono.**

- I developed a framework that allows the user to import a custom file format (.city) and load 3D cities ready to be edited into the 3D view.
- I designed and implemented our standard library, consisting of classes like City, Road, RoadData, Lane, etc. The library exposes a simple API that makes creating roads/cities easy on the fly, by handling all communication with the 3D renderer.
- We have an initial prototype at github.com/dhruvwarrier/city-builder.

Co-founder and Developer at Pulse, Hatchery

Ø mypulse.ca,
 Ø github.com/dhruvwarrier/pulse-website

I was part of the Hatchery NEST summer cohort (a start-up process at University of Toronto: <u>uofthatchery.ca</u>) as part of team Pulse. We explored ways to improve the events experience for young professionals and organizations, with a focus on networking and career-related events. Pulse gave me an appreciation of the product behind the code, and an opportunity to experience a highly iterative and dynamic design process.

- I directed and pitched our product at biweekly pitch sessions in front of a panel of investors, and worked with our mentors to constantly increment our product.
- I worked with multiple on-campus student groups to campaign the use of Pulse within the student community, and to hear their grievances regarding the event organization and attendee experiences.
- I developed Pulse's current website at <u>mypulse.ca</u> using **HTML, CSS, JS and jQuery.**

skills

Front-end web design	Game design	Languages	other
 HTML5 CSS3 JavaScript jQuery Jade (Pug) 	 C# (Mono, .NET) Unity Blender Photoshop 	 C# (.NET) JavaScript C++ C Verilog 8085 assembly 	 Git Visual Studio 2015 MATLAB Netbeans Linux - Debian MS Office

bending-moment-analysis: Analyses the max bending moment of a train passing over a bridge. Features a 2D simulation and a GUI. Written in C#.

pi-mirror: A smart mirror platform for the raspberry pi. In early development using electron.js and express.js.

raycast-3d-maze-verilog: A 3D renderer for Cyclone V FPGAs, written in Verilog. Designed for VGA displays.

othello-ai: An AI that plays the board game Othello, using a predictive method to look several moves ahead. Features a command-line interface. Written in C.

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- github.com/dhruvwarrier/othello-ai

education

University of Toronto St. George

BASc Computer Engineering (GPA 3.2) SEP 2017 – APRIL 2021 (expected) 27 King's College Cir, Toronto, ON M5S 3H7, Canada +1 416-978-2011

 Elected First Year Computer Engineering class representative, member of Faculty Council