Dhruv Warrier

creating things and always looking to learn from them. I'm passionate about working with teams and have experience with designing software solutions. I'm capable at front-end web design, and have experience with **C#** (Mono), JavaScript, C++ and C.

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M5G1R1

I am looking for an internship that will help me grow with your company, and constantly push me to **create and learn new things**.

experience

Research Assistant DEC 2017 - PRESENT

I'm a member of Dr. Tamer Diraby's research group, creating software tools for civil engineers using insights from Dr. Diraby's research. Our current focus is "city-builder", a large-scale application that can help civil engineers design roads and cities. I'm part of a team of 2 designing and implementing the software in **C# (Mono, cross-platform)**.

- I designed a backend framework that allows the user to import and export ".city" files 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 present our work every 2-3 weeks to the research group.

Founder of Broken Table Studio

SEP 2017 - PRESENT

Ø brokentablestudios.com,
 Ø github.com/dhruvwarrier/905

I founded BTS, a small indie game studio with members from Toronto, USA, and India. I direct and manage all the teams from the Creative and Development (Programming/3D modelling) teams to the Project Management and Executive teams. I also actively work on programming and 3D modelling 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#**.

- 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>brokentablestudios.com/demo</u>. It showcases our 3D modelling design and an old, early version of the movement/animation systems.

Co-founder at Pulse

@ mypulse.ca

I started and co-founded Pulse, a start-up sponsored by the Entrepreneurship Hatchery NEST, a startup incubator at University of Toronto (<u>uofthatchery.ca</u>). Pulse is currently exploring 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 understanding of the trust consumers put in a product.

- 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 our current website at mypulse.ca using HTML, CSS, JS and jQuery.

skills

Front-end web design	Game design	Languages	other
 HTML5 CSS3 JavaScript jQuery Jade (Pug) 	C# (Mono)UnityBlenderPhotoshop	C#JavaScriptC++C	 Git Visual Studio 2015 MATLAB MS Office

projects

905: A game about the Zeroth Law. Being developed at Broken Table Studio on UnityEngine in C#.

othello-ai: An AI that plays the board game Othello. Features a command-line interface. Written in C.

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

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

- github.com/dhruvwarrier/905
- brokentablestudios.com/demo
- github.com/dhruvwarrier/othello-ai
- github.com/dhruvwarrier/bendingmoment-analysis
- github.com/dhruvwarrier/pi-mirror

education

University of Toronto St. George

BASc Computer Engineering (GPA 3.27) 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
- Member of UofT Robotics Association Humanoid team, performing research on high-level synthesis of MATLAB, C++/C code into hardware descriptor languages like Verilog