KALEN **ARENDT**



EDUCATION

Bachelor of Computer Science Honours (Co-op) – 3rd Year

University of

2019 - 2025

Entrance Scholarships: University of Manitoba, WYSA, Higher Learning Fund (2019)

Manitoba

Awards: Dean's Honour Roll (Winter 2022)

★ Databases

- **★** Object Oriented Programming
- **★ Data Structures and Algorithm**
- **★ Programming Practices**
- **★** Analysis of Algorithms

Extracurricular Professional Development

Udemy

★ Complete C# Unity Game Developer 2D

2022

★ Programming Design Patterns For Unity – Write Better Code

2022 – Present

★ Design Patterns in C# and .NET

TECHNICAL SKILLS

Practical Experience	Visual Studio C#, Unity Java, NetBeans Windows 10 Microsoft Office	2017, 2019 Community Editions; my favourite IDE. Created several games and application using C# and Unity. Wrote a text file processor to reduce time spent taking notes from PDFs. The operating system on my laptop and desktop. Used for taking notes and creating assignment solutions.
Course Knowledge	SQL, SSMS JavaScript C C++ OpenGL HTML, CSS Python	Implemented database schemas; then wrote queries on the databases. Implemented a Huffman Encoder. Implemented a Relational Database and Named Memory Regions. Implemented an Event-Driven Simulation. Used by Processing in a Computer Graphics course. Creating a basic website to implement usability techniques. Started some Udemy courses on Python.
Familiar With	Version Control	Used TortoiseSVN to back up select personal projects.

WORK EXPERIENCE

Statistician – Genius Sports

June 2019 - Present

- ★ Attending live sporting events, sending real time data like shots and goals using a mobile interface, to facilitate fan interaction such as live feeds and betting odds.
- ★ Using the correct command flow in each situation to ensure markets are not exposed.

Front Desk Receptionist – Coast Appliances

May 2021 - Present

- ★ Greeting customers, to make them feel welcome and looked after.
- ★ Answering the phone; transferring calls to the appropriate sales people or handling simple inquiries myself so the sales team can focus on more pressing matters.

Administrative Assistant – Symptomatic Covid-19 Swabbing Site

June 2021

- ★ Entered patient data quickly and accurately to minimize the time they spent in the building.
- ★ Setup the printer on the network so that all laptops could print directly, which resolved the bottle neck of everyone having to ask a single person to print everything.

PERSONAL PROJECTS – CREATED WITH C# & UNITY

Perfect Periodization Playmaker – create, store, and simulate soccer tactics

Recently Started

- ★ Implementation Idea: use a directed graph, where:
 - ⋆ Nodes contain the positioning of players relative to the ball,
 - ★ Edges are the movement of the ball between players or zones, and
 - ★ Paths are determined at runtime by binary decision trees.

Kristo's Adventure – 2D platformer RPG with a focus on strategic turn-based battles

In-Progress

- **★** Features:
 - Level Loading System to move between levels via doors and wormholes.
 - ★ Turn-Based Battle System and UI with multiple attacks for the player to use.
 - ★ Attacks are animated, deal synchronized damage, and have particle and audio FX.
 - ★ Weapon System so the player can equip weapons and use additional attack.
 - ★ Gain experience and coins from winning battles and level up your stats.

Assistant Coach – automate building a training session plan based on curriculum topics and age

Complete

- ★ The session is constructed by randomly selecting training blocks queried by age and topic from a local database that I manually created from my club's Dropbox files.
- ★ Features:
 - ★ Iterate through training blocks until you are satisfied with the overall training plan.
 - ★ Save the training plan for later reference, such as before training.
 - ★ Customize the way a session is displayed, regarding layout and font size.

VOLUNTEERING

Soccer Coach – Winnipeg South End United

2016 - 2021

- ★ Coached players from U10 to U14 a 5 year period that included over 50 players.
- ★ Planned and demonstrated training sessions to set the expectations for the players.
- ★ Learned from experience which games and activities were most effective.
- Built relationships with players to bolster their confidence and therefore performance.
- ★ Achievements:
 - ★ Trained the P2 team (U13, U14) 6 of my players made the jump to the P1 team.
 - ★ Assistant Coach of the U11 WSEU Academy Team in 2018 and 2019.

INTERESTS AND ACTIVITIES

Games & Applications	As seen in my personal projects and education, I enjoy creating games and applications.	
Software Development & Databases	My favourite CS topics are software development and databases. I believe my future lies in one or both of these areas.	
Self Directed Learning	I like taking courses on Udemy, to further improve myself as a developer.	
Coaching Soccer	It is extremely satisfying to witness a player's development over the course of a season.	
Playing with my Dogs	I have 2 small dogs which I love to pieces. I have fun training them and playing with them.	

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