

# KALEN ARENDT

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## EDUCATION

### Bachelor of Computer Science Honours (Co-op) – 3<sup>rd</sup> Year

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

Awards: Dean's Honour Roll (Winter 2022)

University of  
Manitoba

2019 – 2025

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

### Extracurricular Professional Development

Udemy

- ★ Complete C# Unity Game Developer 2D
- ★ Programming Design Patterns For Unity – Write Better Code
- ★ Design Patterns in C# and .NET

2022

2022

2022 – Present

## TECHNICAL SKILLS

Practical Experience	<b>Visual Studio</b> <b>C#, Unity</b> <b>Java, NetBeans</b> <b>Windows 10</b> <b>Microsoft Office</b>	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	<b>SQL, SSMS</b> <b>JavaScript</b> <b>C</b> <b>C++</b> <b>OpenGL</b> <b>HTML, CSS</b> <b>Python</b>	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 <b>Processing</b> in a Computer Graphics course. Creating a basic website to implement usability techniques. Started some Udemy courses on Python.
Familiar With	<b>Version Control</b>	Used <b>TortoiseSVN</b> 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.