

ARTHUR NONAY

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[GitHub](https://github.com/ANonay32): <https://github.com/ANonay32>

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[Portfolio](https://anonay32.github.io/): <https://anonay32.github.io/>

Objective

Coding enthusiast seeking an opportunity to further develop professionally and to work collaboratively in a professional environment. Trained in Agile philosophies and software development practices. Eager to learn and gain mastery of new languages. Problem solver looking for unique solutions to difficult challenges.

Technical Skills

- Languages: Python (Advanced), C/C++ (Intermediate), C# (Intermediate), MySQL (Advanced), CUDA (Intermediate)
- Tools: Git, ATOM, Linux-based OS, VMWare, Visual Studio, Eclipse
- Learning: FHIR, XML, JavaScript

Projects

Newber – Ride-sharing App completed as a capstone (C++/ JavaScript)

- Collaborated with peers using Agile philosophy to have achievable milestones and consistent progress
- Used Kanban and Scrum techniques as a team to facilitate Agile development
- Implemented atomic functions and thread synchronization to avoid race conditions
- Designed, implemented, and maintained unit tests to ensure bug-free releases
- Optimized app layout for compatibility with the full lineup of Android hardware

Go-Playing Bot – Machine learning Go bot (Python)

- Worked with a partner to design and program a ML algorithm that learnt to play Go at an intermediate level
- Iterated on a stochastic gradient descent function with backpropagation to train the model
- Varied weights during training to create versions that favoured the early, mid, and late-game
- Participated in a class-wide tourney to rank the best-fit functions, placing 8th out of 41 teams

CascenE (Hack-a-thon) – Discord utility to facilitate playing Dungeons and Dragons online (Python)

- Conceived and programmed within a single 24-hour window as part of the 2021 University of Alberta HackED hack-a-thon
- Taught two brand-new developers the basics of programming in Python as well as simple version control with Git
- Utilized existing Discord API to avoid re-inventing the wheel and concentrate dev time onto meaningful tasks
- Collaborated with real members of the hobby community to determine practical applications and use-cases

SFMapBuilder – Windows application for the video game Second Front (C#)

- Written for Second Front and designed to cover shortcomings of the in-game map editor
- Successfully reverse-engineered the game's 'black box' engine to determine how map functionality worked
- Integrated Windows Explorer functionality for smooth input of map files
- Algorithmically performed sanity checks on created maps to ensure compatibility with game logic
- Learned C# with no prior experience to create a functioning desktop application

Education

Bachelor of Science in Computer Science – University of Alberta – Edmonton, AB

September '18 - December '22

- Dean's List Fall '21 - Winter '22
- 3.4 GPA
- Educated in Machine Learning
- Graduated with distinction