EVAN MELTZ

Toronto, ON | Canadian Permanent Resident (no sponsorship needed) | Meltze0906@gmail.com | https://www.linkedin.com/in/evan-meltz/

PROFILE

Al-focused Game Programmer (MSc, Computer Science – Artificial Intelligence) building gameplay & agent systems in Unity/Unreal. C++/C#/Python; Reinforcement Learning (RL) (PPO/SAC/DDPG); behavior trees/utility Al; Procedural Content Generation (PCG). Former TA for Game Research & Al. Seeking Gameplay/Al Programmer roles in Canada (PR).

SKILLS

Languages: C++, C#, Python, Java, SQL

Engines/Tools: Unity, Unreal Engine 5, Visual Studio, Git, PyCharm, IntelliJ

Al/Systems: Reinforcement Learning (PPO, SAC, DDPG), Behavior Trees, Utility AI, PCG, Player Modeling

Other: Data Structures & Algorithms, Software Architecture, Optimization, Networking

PROJECTS

Real-Time Adaptive Game Difficulty (Thesis) — Unity (C#)

2025

- Developed an adaptive difficulty module for a 3D wave-shooter prototype that adjusts difficulty in real time via player performance signals.
- Implemented parameter tuning for enemy spawns, accuracy and tactics to maintain "flow" and encourage skill growth.
- Repo: https://github.com/Evan09064/Thesis---3D-Wave-Shooter

TrackMania RL Agents — Python, PyTorch; Unity sim.

2024

- Implemented and compared SAC, DDPG and PPO agents; evaluated CNN (pixels) vs MLP (LIDAR) observations.
- · Focused on stability, reward shaping and sim-time performance for real-time play.
- · Repo: https://github.com/Evan09064/TrackmaniaAl

NPO Disaster-Relief Logistics System — C#/.NET + SQL

2022

- Built a full-stack web app for a South African non-profit to manage stock, donations, and field updates.
- Designed the relational schema and admin flows; documented requirements, test cases, and handover.

PROFESSIONAL EXPERIENCE

Teaching Assistant, Leiden University, Leiden, Netherlands

February 2025 — July 2025

Semester Course: Artificial Intelligence. Created content & weekly labs; mentored RL/ML assignments and code quality.

Teaching Assistant, Leiden University, Leiden, Netherlands

September 2024 — December 2024

Semester Course: Video Games for Research. Supported student game projects; ran workshops on Al behaviors & design experiments.

Private Tutor, (Freelance), Johannesburg, South Africa

February 2020 — June 2023

Coached students on IT/software projects; reinforced core CS concepts 1:1.

Earlier roles: comic/game store retail crew, au pair, part-time McDonald's crew

— Available on request

EDUCATION

MSc Computer Science specialising in Artificial Intelligence

September 2023 — August 2025

Leiden University, Leiden, Netherlands

Relevant coursework: Game Al Algorithms, Reinforcement Learning, Computational Creativity / PCG, Evolutionary Algorithms, Deep Learning, Optimization & Decision Analysis. Thesis: Real-Time Adaptive Game Difficulty.

BSc Computer and Information Sciences in Application Development February 2020 — November 2022

IIE Varsity College, Johannesburg, South Africa Graduated with Distinction (avg 89%).

Relevant coursework: Algorithms & Programming (Prog 1A-3B), Software Engineering, Computer Networks.

ADDITIONAL INFORMATION

• Links: GitHub