

Greg Morenz

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gitlab.com/users/gmorenz/projects

github.com/gmorenz

Work:

2018 (fall, winter) – UofT, TA for MAT135/136 (Intro to Calculus)

2017 (summer, fall) – UofT, Dept. Of Molecular Genetics – Software development for Mikko Taipale's lab

2017 (winter) – UofT, TA for CSC 384 (Intro to AI) and CSC 263 (Data Structures and Analysis)

2016 (fall) – UofT, TA for CSC 165 (Mathematical Expression and Reasoning)

2015 (summer) – 2016 (winter): UofT, Dept. Of Psychology – Developing android software for memory research

2014 (summer): PaddleFoot – guiding canoe trips in Algonquin Park

Technology:

2018: A talking text editor gitlab.com/gmorenz/speaking-editor

2017: Implemented coroutines and python-like generators in rust gitlab.com/gmorenz/coop

2017: Implemented real time vulkan based ray tracer optimized for performance (joint work with Felipe Orozco) gitlab.com/gmorenz/csc418-raytracer

2016: Created proof of concept streaming video library (custom UDP networking protocol, arithmetic encoding based compression, in Rust) gitlab.com/gmorenz/vchat

2016: Implemented Wayland wire protocol library (via code generation, in Rust) gitlab.com/gmorenz/waywire

2015: Participated in the SEEK robotics competition (using Arduino microcontrollers)

2014: Worked on Piston (game engine) as a way to learn Rust

2014: MIT Battlecode competition (in Java) – finished in top 16 in Sprint Tournament

2011: University of Toronto Space Design Contest

Many years ago: First Lego League Robotics Competition

Programming languages:

Fluent in Rust, Python, C++/C, Javascript, Java

I have used C#, Unix shell scripting (e.g. bash), Ruby, Go, SML, Racket, Lisp, Elm, Haskell, R, x64 assembly, etc. (and fwiw quake virtual machine bytecode).

Education:

University of Toronto, fourth year Math and Computer Science undergraduate student

Selected courses:

CSC 488 – Compilers

CSC 463 – Complexity Theory

CSC 438 (crosslisted on the grad timetable as 2404) – Computability and Logic

CSC 418 (crosslisted on the grad timetable as 2504) – Computer Graphics

CSC 473 – Advanced Algorithms

CSC 384 – Intro to AI (TA for the semester after taking)

CSC 265 – Enriched Data Structures and Analysis (TA for the normal version, CSC 263)

CSC 240 – Enriched Intro to the Theory of Computation (TA for the normal version, CSC 165)