

ALEX HEYMAN (they/them)

Legal name: Andrew Heyman

abheyman23@sbcglobal.net

<http://www.alexheyman.org/>

GitHub: AlexHeyman

LinkedIn: /in/alex-heyman-94336a143/

Graduate student at York University

Education

York University (York U)

2021-present

Lassonde School of Engineering

Master of Sciences in Computer Science

University of Toronto (U of T)

2017-2021

Faculty of Arts & Science

Specialist in Computer Science with Focus in AI, Major in Cognitive Science, Minor in Philosophy

Innis College

University of Chicago Laboratory Schools (UCLS)

9th through 12th grade, 2013-2017

Honors and Awards

York U

Vector Scholarship in Artificial Intelligence (2021-22)

Lassonde Graduate Entrance Scholarship (2021)

AI-EGS (AI Systems: Engineering, Governance, and Society) Trainee Funding Award (2022)

U of T

President's Scholar of Excellence

Innis College Exceptional Achievement Award (2019)

Innis College Alumni Association Scholarship (2020)

UCLS

National Merit Finalist

Skills

Machine learning

- Experience with TensorFlow, PyTorch, and scikit-learn

- York U EECS6322 – Neural Networks and Deep Learning
- York U EECS6127 – Machine Learning Theory
- York U EECS6327 – Probabilistic Models and Machine Learning
- U of T CSC413 – Neural Networks and Deep Learning
- U of T CSC412 – Probabilistic Machine Learning
- U of T CSC311 – Introduction to Machine Learning

General computer programming

- 9+ years of experience
- High familiarity with Java, Python
- Moderate familiarity with C, Lua, JavaScript
- Some familiarity with C++

Video game design and programming

- 10+ years of amateur experience

Web design, including use of HTML, CSS, and JavaScript

Mathematics up through linear algebra (U of T MAT223 & MAT224)
and multivariable calculus (U of T MAT237)

Symbolic logic (University of Chicago PHIL20100, U of T CSC240)

Publications

Information Utilitarianism

Published in *Perspectives on Ethics* (Journal of the University of Toronto Centre for Ethics)

Presented at “Ethics, Intersections, Reflections: C4E Undergraduate Research Conference” on 2021-07-17

Conference description, link to paper, and link to 15-minute talk:

<https://c4ejournal.net/2021/07/23/ethics-intersections-reflections-c4e-undergraduate-research-conference-2021-c4ej-33/>

Selected projects

MSc thesis research with Prof. Joel Zylberberg – began 1st year; ongoing

Population-based training of neural networks for TensorFlow (research with Prof. Jimmy Ba)

Link: <https://github.com/AlexHeyman/PopulationBasedTraining>

Undergraduate 2nd year

Cell2D – Java 2D game development library

Website: <http://www.cell2d.org/>

Development began 12th grade; ongoing/intermittent

Echo – short puzzle-platforming video game made in 38 hours

Website: <http://alexheyman.itch.io/echo>

Undergraduate 1st year

Activities

Undergraduate Fellow at the U of T Centre for Ethics – Undergraduate 4th year

Politics section editor at the UC Gargoyle student newspaper – Undergraduate 4th year

Office hour holder at the U of T Cognitive Science and Artificial Intelligence Students' Association
– Undergraduate 2nd – 4th year

Member of the U of T Ethics Club – Undergraduate 2nd – 3rd year

Member of the U of T Machine Intelligence Student Team – Undergraduate 1st year