# Nico Schiavone

n.schiavone@mail.utoronto.ca \( \rightarrow \text{mesophil.github.io} \( \rightarrow \text{linkedin.com/in/nicoschiavone} \( \rightarrow \text{github.com/mesophil} \)

#### **EDUCATION**

### University of Toronto, Department of Computer Science

Sept 2024 - Jan 2026

M.Sc. Computer Science

Toronto, ON

4.0/4.0 cGPA; Vector Institute Affiliate; Supervisors: Dr. Sheila McIlraith, Dr. Eldan Cohen

### University of Alberta, Department of Electrical & Computer Eng.

Sept 2019 - May 2024

B.Sc. Engineering Physics with a Mathematics Minor; 4.0/4.0 cGPA

Edmonton, AB

**Frameworks**: Python, Java, PostgreSQL, JavaScript, TypeScript, React.js, HTML5, Abaqus, Git, GCP, PyTorch **Awards**: NSERC Undergraduate Research Award x 3, Dean's Research Award, Most Outstanding ECE Research Award.

#### **EXPERIENCE**

Microsoft June 2025 - Aug 2025

Software Engineering Intern

Redmond, WA

- Business & Industry Copilot team - efficient architectures for multi-turn LLM conversation

## **Vector Institute & University of Toronto**

Sept 2024 - Present

Graduate Student Researcher

Toronto, ON

- Mathematical research in generalist agents, cooperative AI, and algorithms. 1 paper in ICML MAS, 2 in prep.

### University of Alberta

Jan 2023 - June 2024

Machine Learning Researcher

Remote

- Designed an efficient **computer vision** algorithm in Python, utilizing a novel active learning algorithm that rivals state-of-the-art models while using 80% less annotation data, resulting in a **first author** conference paper, published at IEEE CAI 2024 and selected for **oral presentation** (top ~5% of accepted papers). (GitHub)
- Engineered algorithms using **reinforcement learning** and **NLP** with **large pretrained models** for data efficient classification based on adaptive image synthesis, resulting in another **first author** manuscript. (<u>GitHub</u>)

TELUS Jan 2023 – Aug 2023

Software Engineer Intern

Remote

- Spearheaded the development of a **full stack** Python XML scripting tool for a 20+ person team to automatically correct errors between sets of files, reducing the time spent per file by 95%.
- Developed a **full stack** document extraction tool, decreasing time needed by 90+% for teams of 10+ people.

May 2022 – Aug 2022

Software Research & Development Intern

Vancouver, BC

- Independently operated and maintained an entire **DAQ gantry** and laser test facility for the Hyper-K group.

### **PROJECTS**

**TRIUMF** 

**UNI-Scraper** (GitHub) (Demo): Web scraping tool using Scrapy and Playwright in Python for easy viewing of the entire catalogue of UNIQLO. Front-end built for dynamic CSV display and filtering, including per-column search. Stack includes Python, Django, Supabase, PostgreSQL, TypeScript, and React.js.

Huginn - Autonomous Retrieval Drone (GitHub): Self-guided custom drone using computer vision for object detection, real-time classification, and a novel magnetic interface for object pickup. Made in Python using PyTorch, Maylink, and ROS, with a front-end in JavaScript with BootStrap4.

### **PUBLICATIONS**

N. Schiavone, E. Cohen, S. McIlraith. *It's Rational for AI Agents to Procrastinate*. [ICML 2025 MAS Workshop] N. Schiavone\*, J. Wang\*, S. Li, R. Zemp, X. Li (2024). *MyriadAL: Active Few Shot Learning for Histopathology*. [IEEE CAI 2024, Oral Presentation, (link)]