



Adamo Orsini

PhD student, Computer Science

Concordia University · Mila

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PROFILE

I'm a PhD Student in Computer Science studying AI Agents.

My current research projects are focused on Mobile GUI Agents, Mobile App Navigation, and Human Avatar Generation.

EXPERIENCE

Teaching Assistant

September 2025 – Present

Concordia University

Montreal, Canada

- Taught COEN 243, Programming Methodology I, under Professor Xinxin Zuo in Fall 2025 and returning for Fall 2026.
- Prepared lesson plans, slides, and practice questions on C++ fundamentals, object-oriented programming, and data structures for over 40 students.
- Preparing to coordinate the labs for COMP 6321, Machine Learning, under Professor Yang Wang in Fall 2026.
- Updated legacy course content to ensure students keep up with modern standards.

C++ · Teaching · Course Design

Chief Technology Officer

January 2024 – Present

SoftGolf

Remote

- Led re-architecture and re-development of the SoftGolf platform into a modern full-stack web application.
- Collaborate regularly with CEOs and customers to continuously deliver new requirements.
- Developed responsive web application using Next.js, tRPC, Prisma, and PlanetScale with scaling and SEO at the forefront.

Software Architecture · Next.js · Tailwind · PostgreSQL · tRPC · Prisma · PlanetScale · SEO

Machine Learning Consultant

January 2024 – April 2024

MECP

Montreal, Canada

- Collaborated with MECP via Concordia University to develop two scalable algorithms for matching MECP products with competitor products to ensure competitive price points.
- Implemented semantic matching using the SBERT Large Language Model and similarity search using fuzzy matching to find matching products between multiple product databases.
- Utilized Spark to query and manipulate data from a MySQL database of products retrieved via web scraping and product inventory APIs.

PySpark · Python · MySQL · Machine Learning · Big Data Analytics

Software Engineer Intern

May – August 2023

Laboratory of Energy Policy (LEST)

Ljubljana, Slovenia

- Developed PV solar panel investment tool usable by energy communities to estimate CO2 emissions, energy cost and savings over time, and their optimal PV configuration.
- Planned, presented, and designed scalable full-stack web application architecture for a new project.
- Supported extension of application data by planning a customizable API for use by new country representatives.

Software Architecture · Next.js · Tailwind · PostgreSQL · tRPC · Prisma

EDUCATION



Doctor of Philosophy in Computer Science

Jan 2026 – Expected May 2029

Concordia University

Montreal, Canada

GPA 4.3 / Research Topics: Mobile GUI Agents, Computer Vision



Master of Science in Computer Science

Sep 2024 – Dec 2025

Concordia University

Montreal, Canada

GPA 4.3 / NSERC CGS Master's Recipient

/ Relevant Courses: Representation Learning, Advanced Robotic Vision, Robust and Federated Learning



Bachelor of Engineering in Software Engineering

Concordia University

Sep 2020 – May 2024
Montreal, Canada

GPA 3.92 / Dean's List (2020 - 2024) / Graduated with Distinction / Member of the Institute for Co-operative Education



DEC in Sciences

John Abbott College

Sep 2018 – Jun 2020
Sainte-Anne-de-Bellevue, Canada

Honour Roll Student (2018 - 2020) / Graduated in the top 10% of the Sciences program

PUBLICATIONS

One Image Is Enough: Self-Generated Supervision for Personalizing Human Video Diffusion at Test Time

2026

Sadman Rakib Pinon, Adamo Orsini, Yanis Falaki, Linlian Jiang, Jacob Kingi, Yang Wang, Xinxin Zuo
under review

LUPI-GCD: Generalized Category Discovery with Privileged Multimodal Information

2026

Jacob Kingi, Hareekrishna Vellore Shanmugam, Zhixiang Chi, Sadman Rakib Pinon, Adamo Orsini, Yanan Wu, Yang Wang, Xinxin Zuo
under review

PrefGUI: Evaluating Preference-Conditioned Selective Information Use in Mobile GUI Agents

2026

Hannuo Zhang, Zhixiang Chi, Seyed Mehdi Ayyoubzadeh, Adamo Orsini, Xiaowen Zhang, YUANHAO YU, Yang Wang, Xinxin Zuo
withdrawn

Not All Graphs Are Maps: A Task-Agnostic Exploration Framework for Mobile GUI Navigation

2026

Adamo Orsini, Seyed Mehdi Ayyoubzadeh, Sadman Rakib Pinon, Hannuo Zhang, Koosha Gholipour Baradari, YUANHAO YU, Xinxin Zuo, Yang Wang
under review

SELECTED PROJECTS

CommunityGrid

September 2023 – April 2024

WEB APP MANAGEMENT & DESIGN

- Developed application to manage energy capacity congestion in low voltage networks by scheduling, prioritizing, and predicting electric vehicle charging bookings.
- Managed 8-month long project lifecycle via task allocation, stakeholder meetings and progress reports in an Agile environment.
- Deployed multi-container Dockerized application using Next.js, tRPC, shadcn/ui, Prisma, FastAPI on DigitalOcean.

Project Management · Next.js · Docker · tRPC · FastAPI · Cypress · TypeScript

Handle

March – April 2023

WEB APP DESIGN

- Designed interactive ASL Wordle game to promote ASL learning and communication.
- Used Tensorflow.js hand-tracking model to track hand joint movements.
- Surveyed test population of inexperienced ASL users, resulting in a 70% accuracy improvement after using our app.

Tensorflow · React · Vite

Interlinked

January – April 2023

WEB APP DESIGN

- Led frontend development by recording React and Next.js tutorials for teammates, pair programming, and showing clear communication.
- Developed LinkedIn clone designed for IT and tech professionals using React, Next.js, Cypress, Firebase, and Vercel.
- Presented as one of the best projects in the class thanks to successful task allocation, task dependency mapping, and implementation scheduling.

Project Management · Next.js · Firebase · Cypress · TypeScript

CrossCast

January 2023

WEB APP DESIGN

- Designed centralized application for cross-platform company updates and news across various social media platforms.
- Directed development of full-stack Next.js and TypeScript web application.
- Won Mirego sponsorship challenge at ConUHacks VII.

Project Planning · Next.js · TypeScript

	GunHead GAME DESIGN - Created 2D side-scrolling platformer using C# in Unity in 48 hours. - Led the development team and storyboarding process. - Submitted to the 2022 Concordia Game Jam. Unity · C#		October 2022
	Theme Song Welcome Bot DISCORD BOT DESIGN - Designed Discord bot to play a unique theme song for each user. - Handled asynchronous commands and events for over 1200 users. - Developed bot using Discord.py API in Python. It is hosted by Heroku and uses a MongoDB database. Python · Discord.py · MongoDB		October – November 2021
TEACHING	COEN 243: Programming Methodology I Teaching Assistant, Concordia University Introduction to C++ under Professor Xinxin Zuo.		Fall 2025 · Fall 2026
	COMP 6321: Machine Learning Lab Coordinator, Concordia University Lab coordinator under Professor Yang Wang.		Fall 2026
HONOURS & AWARDS	Jan 2026	Doctoral Graduate Fellowship Concordia University	
	Jan 2026	Jang-Hwan Kwon Graduate Award in Computer Science Concordia University	
	May 2025	NSERC Canada Graduate Scholarship (Master's) NSERC	
	Feb 2025	Italian Association Bursary Associazione Italo-Canadese Del West Island	
	Aug 2023	Quebec Mobility Bursary Ministère de l'Éducation et de l'Enseignement supérieur	
	Jan 2023	Mirego Sponsor Challenge Winner, ConUHacks VII Concordia University	
	Feb 2022	Best National Team, ENGCOMM 2022 ENGCOMM	
	Nov 2021	3rd Place, Englympics: Programming Concordia University	
	Oct 2021	1st Place Winner, ENGCOMM x Concordia Concordia University	
	Mar 2021	Participant, Genetec Challenge Genetec Inc.	
SKILLS	Jan 2021	Bursary for Excellence in Engineering Concordia University	
	Languages Python · TypeScript · JavaScript · HTML · CSS · Java · C++		
	Frameworks PyTorch · NumPy · Next.js · React · Astro · Express		
	Spoken English (Native) · French (Intermediate)		