SachaGoldman

Computer Science and Mathematics Student

Location

Toronto, Canada

US + Canadian Citizen
Willing to Relocate

Languages

♥ Python, Swift,
C, TypeScript

Tools

PyTorch, Numpy,
LaTeX, Git, Shell

Online

Email
sachagoldman@icloud.com

Website
sachagoldman.com

Github
SachaGoldman

LinkedIn
Sacha Goldman

Awards

New College Council
In-Course Scholarship

William and Shirley Read
Scholarship

VSB District Scholarship

Education

Computer Science and Mathematics University of Toronto — Bachelors of Science
3.82/4.0 GPA Graduating May 2023

Primarily interested in the theoretical aspects of machine learning, and how we can improve upon current paradigms. Taken courses in probabilistic learning and deep learning. Also fascinated by pure math. Taken courses on probability theory, real analysis, topology, differential geometry, linear algebra, and group theory.

Experience

University of Toronto Teaching Assistant — Toronto, 2021

Tutorials | Marking | Theory of Computer Science

Teaching assistant for CSC236, an introductory course to computer science theory. Taught two weekly tutorials, covering concepts like induction, automata, formal languages, and computational complexity. Also marked tests and assignments.

SSENSE Software Developer Intern — Montreal, 2021

Swift | SwiftUI | UIKit | Code Review | Unit Testing

Worked on the mobile team during my 4 month internship, brining a fresh set of ideas to the team, and advocating for a transition to the composable architecture along with the introduction of SwiftUI. Acted as a feature lead on a new image zoom experience. Spearheaded a rewrite of the main product page in SwiftUI, with greatly improved gestures.

Altairix Software Developer Intern — Toronto, 2020

Java | SQL | Statistical Analysis

Developed the web and Android based learning platforms for the Arrowsmith Program during my 4 month internship. Created new ways to present student data to teachers through innovative student reports and interactive graphs.

Projects

K2 — macOS App

Machine Learning | Python | Swift | SwiftUI

K2 improves upon Apple Photos' built-in facial clustering by scanning your photo library and creating an album of each unique face found. The application uses the Photos API to find the pictures, then runs python subprocesses which find the faces in each photo, using a SVM, and vectorize them, using a CNN. These vectors are then clustered using DBSCAN.

Hurdles overcome included tuning the finicky model hyperparameters, and code signing python for the Mac App Store.

sachagoldman.com — Website

Vue | TypeScript

My personal website serving as a home page for my presence online. This website was created from scratch in Vue and showcases my projects and academics.

Prevailed over the challenge of learning Vue, as it was a completely foreign the framework.