

## Education

**McGill University & Mila - Quebec AI Institute** - Montreal, Canada Sep 2021 - Present  
PhD in Computer Science, supervised by Prof. David Rolnick

**McGill University** - Montreal, Canada Sep 2014 - May 2017  
BSc in Physics, thesis supervised by Prof. Natalya Gomez

## Experience

**Machine Learning Engineer, NASA Harvest** - Remote Apr 2020 - Present  
Researching machine learning for remote sensing and agriculture, supervised by Prof. Hannah Kerner

**Machine Learning Engineer, Allen Institute for AI (AI2)** - Seattle, USA June 2024 - Present  
Researching applications of machine learning for remote sensing, mentored by Patrick Beukema and Favyen Bastani

**Machine Learning Research Intern, Small Robot Company** - Remote Summer 2022  
Researched semi-supervised object detection for agriculture, supervised by Dr. Thomas Walters

**Machine Learning Engineer, Okra Solar** - Phnom Penh, Cambodia Sep 2019 - Aug 2021  
Developed data and machine learning pipelines for off-grid solar energy systems

**Researcher, European Center for Medium Range Weather Forecasting** - Remote Summer 2019  
Researched applications of machine learning applied to drought prediction in Kenya

**Machine Learning Engineer, Drop Technologies** - Toronto, Canada Oct 2017 - May 2019  
Developed and deployed end to end machine learning pipelines for Fortune 500 clients in various domains

## Selected Publications

A full list of publications is available on Google Scholar

### **Galileo: Learning Global and Local Features in Pretrained Remote Sensing Models**

**Gabriel Tseng**, Anthony Fuller, Marlana Reil, Henry Herzog, Patrick Beukema, Favyen Bastani, James R. Green, Evan Shelhamer, Hannah Kerner, David Rolnick  
*ICML 2025 (link)*

### **Lightweight, Pre-trained Transformers for Remote Sensing Timeseries**

**Gabriel Tseng**, Ruben Cartuyvels, Ivan Zvonkov, Mirali Purohit, David Rolnick, Hannah Kerner  
*Climate Change and AI workshop at NeurIPS 2023 (link)*

### **TIML: Task-Informed Meta-Learning for Agriculture**

**Gabriel Tseng**, Hannah Kerner, David Rolnick  
*EarthVision Workshop at CVPR 2025 (link)*

### **CropHarvest: A global dataset for crop type classification**

**Gabriel Tseng**, Ivan Zvonkov, Catherine Nakelembe, Hannah Kerner  
*NeurIPS 2021 (link)*

## Awards and Grants

**Leadership in Environmental And Digital innovation for Sustainability (LEADS)** 2021, 2022, 2023  
**Satellite-Enabled Food Security Dashboard to Close Critical Data Gaps in** 2022

**Highly Food Insecure Maui County** (NASA Environmental Equity and Justice Grant)

**European Center for Medium Range Weather Forecasting Summer of Weather Code** 2019

**James McGill scholarship** 2014

## Service

**Machine Learning for Remote Sensing Workshop @ ICLR** - Organizer 2023, 2024, 2025

**NeurIPS datasets and benchmarks track** - Reviewer 2022, 2023

## Additional Interests

Endurance sports (ran 6 ultra-marathons & a DIY-Ironman), rock climbing, SCUBA diving (advanced open water diver)

**Languages:** English (fluent), French (fluent), Mandarin (basic)