



# Joshua Wolfsohn

## Environmental Engineering

Phone: [613-896-2418](tel:613-896-2418) Email: [jpwolfso@uwaterloo.ca](mailto:jpwolfso@uwaterloo.ca) LinkedIn: [linkedin.com/in/joshuawolfsohn](https://www.linkedin.com/in/joshuawolfsohn)

## Education

### BASc, ENVIRONMENTAL ENGINEERING

University of Waterloo – Waterloo, ON

Sep 2018 – Jun 2023

- Key courses: Mechanics, Energy and the Environment, Fluid Mechanics, Physical Hydrogeology, Environmental Modelling, Air Pollution Control, Contaminant Transport, Urban Stormwater Management
- 4<sup>th</sup>-year capstone project: Stormwater Management Plan Design for the Mohenjo-Daro Ancient Ruins, a UNESCO World Heritage Site in Modern-Day Pakistan
  - Acted as Project Manager by coordinating team meetings, delegating tasks to team members, communicating with technical advisors and external stakeholders, and proposing and scheduling project tasks with set deadlines
  - Characterized baseline flow accumulation by acquiring site imagery and elevation data, processing the data using ArcGIS Pro, and interpreting the data to determine the direction and magnitude of flow
- Papers:
  - Application of GIS to Reinforce Canada's Polar-Orbiting Satellite Reception Network (co-op work term report, Sep 2022)
  - Assessing the Impacts of Fine Particulate Matter Emissions from the ArcelorMittal Dofasco Steel Production Facility in Hamilton, Ontario (NPRI Academic Challenge, Apr 2023)

## Employment

### SATELLITE EARTH OBSERVATION ANALYST

Meteorological Service of Canada – Ottawa, ON

May 2022 – Aug 2022

- Developed tools in Python and QGIS to simulate meteorological satellite passes and associated data volumes for technological feasibility study as part of a major satellite reception network upgrade
- Assisted in preparation of departmental response to a consultation paper regarding allowable use of EHF radio frequencies by reviewing and preparing summary of stakeholder inputs
- Evaluated application proposals and GHG calculations for industrial emissions reduction projects to verify eligibility for federal funding

### CARBON MARKETS BUREAU ASSISTANT

Environment and Climate Change Canada – Ottawa, ON

Jan 2022 – Apr 2022 (part-time)

Sep 2021 – Dec 2021 (full-time)

- Audited reports submitted by large emitters in the federal output-based pricing system (OBPS) to ensure regulatory compliance
- Leveraged emissions reporting data to design and create Power BI dashboards for high-level analysis
- Performed research on carbon sequestration and analyzed process emissions data to inform OBPS policy and emissions standards development for voluntary facilities

### STARTUP FOUNDER

Agroage Canada – Ottawa, ON

Dec 2020 – May 2021

- Developed an affordable countertop gardening system prototype by conducting product research and design, marketing and sales, providing customer support, and collecting feedback from a focus group consisting of real customers
- Coded [agroage.ca](https://agroage.ca) website and created blog and social media content to drive sales lead generation

## Employment (cont.)

### SYSTEMS SUPPORT OFFICER

Ontario Ministry of the Attorney General – Toronto, ON

Sep 2019 – Dec 2019

- Migrated large data to Office 365 to reduce high server loads related to daily backups and to boost work productivity
- Authored software user guides for employee training to ease transition from deprecated software

### BILINGUAL SOFTWARE SUPPORT / JUNIOR PROGRAMMER

ADSTRA Systems – Toronto, ON

Jan 2019 – Apr 2019

- Remotely assisted French and English clients with highly urgent issues experienced in proprietary dental software
- Performed software QA by conducting regression testing and identifying critical bugs

## Extracurriculars

### ACADEMIC RESEARCH ASSISTANT

University of Waterloo – Waterloo, ON

Sep 2022 – Jan 2023

- Assisted in preparation of graduate student manuscript quantifying the health impacts of climate change mitigation policy by reviewing existing academic literature

### LEAD FINANCIAL SPECIALIST

Warrior Home – Waterloo, ON

Sep 2020 – Apr 2021

- Led members of Finance Team to conduct project cost estimate and housing market analysis for net-zero building design competition using RSMeans construction cost database
- Supplementary role included assisting in life cycle assessment of net-zero building design using One Click LCA to estimate embodied carbon

### VOLUNTEER TRANSLATOR

Canadian Society for Civil Engineering

- Translated documents about Canadian historic sites from English to French

### VOLUNTEER RESUME CRITIQUES

University of Waterloo

- Reviewed resumes of lower-year students and mentored students to improve co-op employment marketability

## Skills

- Functionally bilingual in English and French (DELF B2)
- Adept at AutoCAD, Word, Excel, Power BI
- Proficient in Java, C#, VB.NET, Python, MATLAB, JS, HTML
- Ontario Class G Driver's License