

## EDUCATION

- **University of Guelph** Guelph, ON, Canada  
*Doctor of Philosophy, Environmental Sciences* *September 2022 - present*
- **McGill University** Montréal, QC, Canada  
*Doctor of Philosophy, Civil Engineering* *September 2021 - August 2022*
- **McGill University** Montréal, QC, Canada  
*Master of Science, Atmospheric and Oceanic Sciences* *September 2019 - August 2021*
- **McGill University** Montréal, QC, Canada  
*Bachelor of Science, Environment - Atmospheric Environment & Air Quality* *September 2015 - May 2019*
- **McGill Field Study Semester** Bellairs Research Institute, Holetown, Barbados  
*Interdisciplinary Tropical Studies* *May 2018 - August 2018*

## SKILLS SUMMARY

- **Programming** Fortran, Bash
- **Analysis** Python (NumPy, xarray, Cartopy, Matplotlib), Matlab, CDO
- **Platforms** Linux, MacOS, Windows
- **Tools** L<sup>A</sup>T<sub>E</sub>X, Microsoft Office, Inkscape
- **Languages** English (professional), Mandarin (native)

## RESEARCH EXPERIENCE

- **Graduate Research Assistant** *September 2021 - August 2022*  
*McGill University*
  - **Model application:** The impacts of urbanization on local seasonal and extreme precipitation patterns with the Canadian Global Environmental Multiscale (GEM) model.
- **Graduate Research Assistant** *September 2019 - August 2021*  
*McGill University*
  - **Model development:** Thermodynamic modelling of carbonate/bicarbonate/CO<sub>2</sub> system and the interaction with water and organic compounds for the AIOMFAC model (<http://www.aiomfac.caltech.edu/>).
- **Research Trainee** *May 2019 - August 2019*  
*McGill University*
  - **Model development:** Thermodynamic modelling of aqueous iodate and sulfate/bisulfate systems and their interactions with organic compounds.
  - **Lab experiments:** Water activity measurements of aqueous iodide, iodate, and bisulfate systems.
- **Research Assistant** *September 2018 - April 2019*  
*McGill University*
  - **Literature review:** Research of literature data on aerosol thermodynamic measurements.
  - **Model development:** Thermodynamic modelling of aqueous iodide systems and their interactions with organic compounds.

## PUBLICATION

- **Yin, H.**, Dou, J., Klein, L., Krieger, U. K., Bain, A., Wallace, B. J., Preston, T. C., and Zuend, A.: Extension of the AIOMFAC model by iodine and carbonate species: applications for aerosol acidity and cloud droplet activation, *Atmos. Chem. Phys.*, 22, 973–1013, <https://doi.org/10.5194/acp-22-973-2022>, 2022.
- **Yin, H.**: Modeling aerosol acidity and cloud droplet activation in marine and dust aerosols: extension of the AIOMFAC model by iodine and carbonate species, MSc thesis, McGill University, Montreal, Canada, <https://escholarship.mcgill.ca/concern/theses/0z7092734>, 2021.

## CONFERENCE

- **Yin, H.**, Sushama, L., and Teufel, B.: Impacts of urbanization on summer precipitation and management of engineering infrastructure systems for Montreal, EGU General Assembly 2022, Vienna, Austria, 23–27 May 2022, EGU22-5182, <https://doi.org/10.5194/egusphere-egu22-5182>, 2022.

## TEACHING EXPERIENCE

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- **Teaching Assistant**  
*University of Guelph - ENVS 2270 -Impacts of Climate Change* *January 2023 - April 2023*
- **Guest lecturer**  
*University of Guelph - ENVS 2030 - Meteorology and Climatology* *26 October 2022*
- **Teaching Assistant**  
*McGill University - ATOC 184 - Science of Storms* *January 2021 - April 2021*
- **Teaching Assistant**  
*McGill University - ATOC 185 - Natural Disasters* *September 2020 - December 2020*

## AWARDS

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### Graduate level

- International Doctoral Tuition Scholarship *September 2022 - April 2026*
- The Mary Edmunds Williams Scholarship *September 2022 - December 2023*
- McGill Engineering Doctoral Awards *September 2021 - April 2022*
- John Bonall Porter Fellowship *September 2021 - April 2022*
- Graduate Excellence Award *September 2019 - August 2021*
- Meteorology Research Graduate Award *September 2019 - August 2021*

### Undergraduate level

- Science Undergraduate Research Awards *May 2019 - August 2019*
- Science Lab without Borders *May 2018 - August 2018*
- Mobility Undergraduate Award *May 2018 - August 2018*

## SERVICE

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- **Member at McGill Peer Support Center** Montreal, Canada  
*Helped graduate students in need of mental health support.* *September 2019 - August 2021*
- **Note Taker for Office for Students with Disabilities** Montreal, Canada  
*Took clear and accurate notes as a supplementary record to lectures.* *September 2019 - December 2019*