Matthew HENRY

Curriculum Vitae

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⌕ *https://matthewjhenry.github.io/*

Education

2016–now **Ph.D. Candidate in Atmospheric and Oceanic Sciences**.
Under the supervision of Timothy Merlis.
McGill University, Montreal, Canada
Recipient of the Eben Hopson Fellowship for Study at McGill

2014–2015 **Master's (2nd year) in Mathematical Modelling (Master M2S Modelisation et Simulation)**.
Master scholarship from Fondation Mathematique Jacques Hadamard Excellence Program
Program managed by Universite Paris-Saclay in Paris, France

2013–2014 **Master's (1st year) in Ocean, Atmosphere and Climate Dynamics**.
Universite Pierre et Marie Curie, Paris, France

2010–2013 **Bachelor of Science, Mathematics Major**.
GPA : 3.73
McGill University, Montreal, Canada

Research Experience

2015 **Machine Learning internship**, *Big Datext, Grenoble, France*.
Work on the prediction of the number of views for a given news article. Access to a large database with more than 100k articles and the corresponding number of views.
Acquired skills in machine learning, python, scikit-learn and natural language processing.
(2 months)

2015 **Master's internship**, *Paris 6 Computer Science Laboratory (LIP6), France*.
Under the supervision of Julien Tierny and Julie Delon
Work on the parallel and multi-scale computation of a transport plan between two distributions in order to generate a suitable time interpolation between them.
Acquired skills in C++ and algorithm design.
(6 months)

2014 **Master's internship**, *LOCEAN (part of the Institut Pierre Simon Laplace), Paris, France*.
Under the supervision of Guillaume Gastineau
Work on the radiative signature of upper tropospheric moistening.
Acquired skills in Matlab and climate science.
(2 months)

2011 **Research Assistant to PhD Student**, *McGill University, Montreal, Canada*.
Helped to conduct meta-analysis to compare the yields of organic agriculture to conventional agriculture by gathering data. Used to publish a paper in Nature.
"Comparing the yields of organic and conventional agriculture", by Seufert, Ramankutty and Foley in Nature 489, 229-232 (10 May 2012)
(2 months)

Publications

2019   **Decomposing the Drivers of Polar Amplification with a Single Column Model**, *Matthew Henry, Timothy M. Merlis, and Nicholas J. Lutsko*, In prep..

Lapse rate changes dominate residual polar warming in solar radiation management experiments, *Matthew Henry and Timothy M. Merlis*, In review at *Nature Communications*.

2018   **The role of the nonlinearity of the Stefan-Boltzmann law on the structure of radiatively forced temperature change**, *Matthew Henry and Timothy M. Merlis*, Journal of Climate, 2018.
doi:10.1175/JCLI-D-17-0603.1.

Simple estimates of polar amplification in moist diffusive energy balance models, *Timothy M. Merlis and Matthew Henry*, Journal of Climate, 2018.
doi:10.1175/JCLI-D-17-0578.1.

Employment History

2016-now   **Teaching Assistant in Atmospheric and Oceanic Sciences department**.
McGill University, Montreal, Canada

2013   **Grader for linear algebra (MATH 223) with Professor Wilbur Jonsson**, *Montreal, Canada*.
(1 year)

2012   **Grader for linear algebra (MATH 318) with Professor Loveys**, *Montreal, Canada*.
(6 months)

2012   **Food Service at the Y Country Camp**, *Montreal, Canada*.
Setting up, serving food and cleaning at a summer camp for children.
(2 months)

2010   **Internship at Yejj Solar Tech**, *Phnom Penh, Cambodia*.
Marketing and setting up solar systems for clients.
(4 months)

2009-2010   **English Tutor**, *Beijing, China*.

Computer skills

Coding   Python, Fortran90, C++, C, Java (in order of familiarity)
Software   Matlab, Paraview

Languages

English   Native
French   Native