

# CAMPBELL WATSON

## ATMOSPHERIC SCIENTIST

Brooklyn, NY — campbell.watson@gmail.com — www.campbell-watson.com

---

### PROFILE

Atmospheric scientist with experience in environmental modeling, big data, analytics and sensors. Effective and passionate communicator of science and culture to non-technical audiences.

### EDUCATION

2008-2013: PhD in Atmospheric Science, The University of Melbourne, Australia  
2000-2006: Bachelor of Science / Bachelor of Commerce, The University of Melbourne, Australia. Majored in atmospheric dynamics & applied math / accounting & finance

### EMPLOYMENT

2014-now: *Research Scientist, IBM Research, TJ Watson Research Center*

- Core member of The Jefferson Project, creating the world's smartest lake
- Building an advanced environmental monitoring and prediction system to understand why the environment of Lake George is changing, and how we can protect it

2016-2017: *Numerical Weather Prediction Scientist, The Weather Company*

- Member of Global Forecasting Sciences in Meteorological Analytics
- Developed a high-impact metric for forecast uncertainty for use in The Weather Channel consumer forecasts

2012-2014: *Postdoctoral Associate, Yale University, Geology and Geophysics*

- Characterized clouds and convection over Dominica from research flights and models
- Member of international field campaign to observe gravity waves over New Zealand

### HONORS & AWARDS

2017: Science Sandbox @ New Lab Fellow. Developed the concept for “*Weather for the People*”  
2017: Imagine Science Film Festival 10<sup>th</sup> Anniversary: Symbiosis Film Competition  
2016: National Science Foundation (NSF) Grant in Macrosystem Biology to assess climate impacts on North American lakes (with A/Prof. Kevin Rose). Funding for 2017-2018  
2012: American Meteorological Society (AMS) prize for best student presentation  
2008: The University of Melbourne Research Scholarship. Funding for 2008-2012  
2008: The John and Betty McCreery Travelling Scholarship  
2008: Australian Meteorological and Oceanographic (AMOS) prize for best presentation

### TECHNICAL SKILLS

**Programming:** Python (SciPy, NumPy, scikit-learn, pandas, etc.), Fortran, scripting languages (e.g., BASH) and IDL. Some experience with Perl, R, MATLAB, Java, C and C++. Frequent use of GitHub for version control, working with an Agile team and parallel computing environments.  
**Software:** Adobe Illustrator/Photoshop/Premier, Microsoft suite. Some experience with ArcGIS, QGIS and AWS.

### ACADEMIC & TECHNICAL ACHIEVEMENTS

**Publications:** Seven peer-reviewed journal articles (plus two in review), 12 invited presentations at research institutions around the world, over 30 conference presentations  
**Expert reviewer** for multiple top atmospheric science journals and NSF grants  
**Patents:** Two patents filed related to machine learning and physical models, five patents under internal review, one published technical note

### INTERVIEWS, MEDIA & OUTREACH

2017: “I, Cloud” Premiered at the 10<sup>th</sup> *Imagine Science Film Festival* (writer and director)  
2017: “I Surfed a Perfect Man-Made Wave in the Heart of Texas” *Vice: Motherboard* (writer)  
2017: “Storm in a log file – V1.0” Premiered at *New Lab NYC* (writer, director and editor)  
2017: “Storm in a log file: A one-man weather station” *IBM Research Blog* (writer)  
2017: “The Weather in Dominica isn’t as it appears.” *Quartz* (interview)  
2017: “Science Solved It” Launch party of the podcast by *Vice: Motherboard* (guest speaker)  
2014: “Eight Miles High.” *Yale Climate and Energy Institute* (interviewed)