

## EDUCATION AND SKILLS

### Harvard University Graduate School of Arts and Sciences, Cambridge, MA Expected May 2022

- **PhD candidate** in Earth Planetary Sciences (EPS): focus on atmospheric research and climate change.
- **GPA** – 3.85.
- **Honors/Awards** – Skaff Family Graduate Environmental Fellowship recipient. The Derek Bok Center Certificate of Distinction and Excellence in Teaching Award (fall 2018 and 2019).
- **Graduate Student Council** – Representative for Department of Earth Planetary Sciences from 2018-present.
- **Memberships** – Sigma Xi, Air & Waste Management Association.

### Imperial College London, London, UK June 2017

- **MSc**– Degrees in Physics (4-year Bsc/Msci degrees).
- **Upper Class Honors** – 2:1.

### Computing Skills Current

- **Modelling skills**- CESM, GEOS-Chem, UKESM.
- **Programming languages**- MATLAB, Python, R, Linux, HPC, AWS, SQL, HTTP.

## WORK EXPERIENCE

### *Research Supervisor, Harvard University:* February 2020 – Present

- Supervise a Harvard undergraduate on a project where we aim to project changes to electricity demand from air conditioning in the CMIP6 simulations.
- Meet with her weekly to discuss updates and ideas going forward.

### *Remote Basketball Operations Analyst, Minnesota Timberwolves:* September 2019 – Present

- Analyze player tracking data for the Minnesota Timberwolves.

### *Research Assistant/Teaching Fellow, Harvard University- EPS, Cambridge, MA:* September 2017 – Present

- Conduct research on regional climate change and the integration of renewable technologies.
- Manage lab and sections for the Harvard College undergraduate course SPU14: *How to Build a Habitable Planet* and GENED1137: *The Challenge of Human Induced Climate Change*.
- Participate in Head Teaching Fellow (TF) workshops.
- Authored a TF manual for SPU14: *How to Build a Habitable Planet*.

### *Longform Blog Editor, Science in the News, Harvard University, Cambridge, MA:* October 2017 – September 2019

- Manage writing and editing of longform blog articles for Harvard's graduate student-run science outreach website.

### *Lab Demonstrator, Imperial College London, London, UK:* March 2017 – June 2017

- Supervised first-year physics students in wave experiments.
- Advised students on writing clear and effective lab reports.

### *Virtual Intern Editor, Climate Institute, Online:* May 2015 – June 2017

- Edited papers and presentations by distinguished scientists affiliated with the Climate Institute.

### *Writer, I,Science, London, UK:* November 2014 – June 2017

- Reported for Imperial College London's student-run science online and print magazine.
- Published eight blog and print articles on topics ranging from robotic dolphins to the increasing concern for climate change health risks.

### *Academic Mentor, EXSCITEC, Imperial College London, London UK:* February 2014 – August 2015

- Taught physics and math to students preparing for A-level examinations.
- Led outreach activities to mentor and inspire youth to study STEM.

### *Writer and Editor, SB Nation Blog Pound the Rock, Online:* August 2013 – March 2018

- Wrote for the San Antonio Spurs team blog (by PSherman42).

- Published over 100 articles (eight of which were featured in *Best of SB Nation NBA*) covering the team's game performance by using statistical analysis.

## PUBLICATIONS

- **Sherman, P.**, ..., *Submitted*: Sensitivity of the Indian Monsoon to regional aerosol emissions. *Geophysical Research Letters*.
- Lu, T., **Sherman, P.**, Chen, X., Chen, S., Lu, X., and McElroy, M.B., *Submitted*: India's potential for integrating solar and on- and offshore wind power into its energy system. *Nature Communications*.
- **Sherman, P.**, Tziperman, E., Deser, C., and McElroy, M.B., 2020: [Historical and future roles of internal variability in modulating Greenland Ice Sheet melt](#). *Geophysical Research Letters*.
- **Sherman, P.**, Chen, X., and McElroy, M.B., 2020: [Offshore wind: an opportunity for cost-competitive decarbonization of China's energy economy](#). *Science Advances*.
- **Sherman, P.**, Gao, M., Song, S., Ohiomoba, P., Archibald, A., and McElroy, M.B., 2019: [The influence of dynamics and emissions changes on China's wintertime haze](#). *Journal of Applied Meteorology and Climatology*.
- Gao, M., ... **Sherman, P.**, ..., 2019: [Ozone Pollution over China and India: Seasonality and Sources](#). *Atmospheric Chemistry and Physics*.
- Gao, M., **Sherman, P.**, Song, S., Yu, Y., Wu, Z., and McElroy, M.B., 2019: [Seasonal prediction of Indian wintertime aerosol pollution using the Ocean Memory Effect](#). *Science Advances*.
- Gao, M., ... **Sherman, P.**, ..., 2019: [China's emission control strategies have suppressed unfavorable influences of climate on wintertime PM2.5 concentrations in Beijing since 2002](#). *Atmospheric Chemistry and Physics*.
- **Sherman, P.** and Archibald, A., 2019: [The Urban Heat Island \(UHI\) is a major source of uncertainty in projections of population-weighted surface temperature under climate change](#). *EarthArXiv*.
- **Sherman, P.**, Chen, X., and McElroy, M.B., 2017: [Wind-generated electricity in China: decreasing potential, inter-annual variability and association with changing climate](#). *Scientific Reports*.
- **Sherman, P.** and van Sebille, E., 2016: [Modeling marine surface microplastic transport to assess optimal removal locations](#). *Environmental Research Letters*.

## POSTERS AND PRESENTATIONS

- The influence of North Atlantic sea surface temperatures on aerosol loading in China (Poster) – AGU (December 2018).
- The influence of North Atlantic sea surface temperatures on aerosol loading in China (Presentation) – Harvard University EPS First-Year Symposium (September 2018).
- Modeling marine surface microplastic transport to assess optimal removal locations (Presentation) – Centre Councillor for the Chartered Institution of Wastes Management Open Meeting on Offshore Wastes – London Borough of Newham (July 2017).