Joshua Hewitt

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Education

Since 2013 Ph.D. candidate Statistics, Colorado State University

Advisor: Jennifer A. Hoeting

2018 Graduate teaching certificate Colorado State University

2009 M.S.E. Applied Mathematics & Statistics, Johns Hopkins University

2009 B.S. with general honors Applied Mathematics & Statistics, Johns Hopkins University

Experience

2009–2013 Statistician, Booz Allen Hamilton

Publications

2018 1. Hewitt, J., Fix, M. J., Hoeting, J. A., and Cooley, D. S. (2018). Improved return level estimation via a weighted likelihood latent spatial extremes model. *Submitted to Journal of Agricultural, Biological, and Environmental Statistics (JABES)*.

- 2. Hewitt, J., Hoeting, J. A., Done, J. M., and Towler, E. (2018). Remote effects spatial process models for modeling teleconnections. *Environmetrics*, e2523, https://doi.org/10.1002/env.2523.
- 3. Schmeer, S. R., Kampf, S. K., MacDonald, L. H., Hewitt, J., and Wilson, C. (2018). Empirical models of annual post-fire erosion on mulched and unmulched hillslopes. *Catena*, **163**, 276–287.

4. Vidal, C., Hewitt, J., Davis, S., Younes, L., Jain, S., and Jedynak, B. (2009). Template registration with missing parts: Application to the segmentation of M. tuberculosis infected lungs. In *Biomedical Imaging: From Nano to Macro, 2009. ISBI'09. IEEE International Symposium* on (pp. 718-721). IEEE.

Workshops

Hewitt, J., Scharf, H., and Fix, M. (2015). Tutorial on Parallel Programming in R. *American Statistical Association Conference on Statistical Practice*, New Orleans, Louisiana. February 2015.

Software

2018 Hewitt, J. (2018). "telefit: Estimation and Prediction for Remote Effects Spatial Process Models". *R package* http://CRAN.R-project.org/package=telefit

Presentations

Invited talks

Improved return level estimation via a weighted likelihood latent spatial extremes model. *Stochastic Weather Generators Conference*, Boulder, Colorado. October, 2018.

Contributed talks

- Improved return level estimation via a weighted likelihood latent spatial extremes model. *Joint Statistical Meetings*, Vancouver, British Columbia. August 2018.
- 2. Remote effects spatial process models for teleconnection. *Joint Statistical Meetings*, Baltimore, Maryland. August 2017.

Departmental seminars

- 2018 1. National Center for Atmospheric Research, Boulder, Colorado.
- 2017 2. University of Chicago, Chicago, Illinois.
- 2016 3. Colorado State University, Fort Collins, Colorado.
 - 4. National Center for Atmospheric Research, Boulder, Colorado.
- 5. Colorado State University, Fort Collins, Colorado.
- 2014 6. Colorado State University, Fort Collins, Colorado.

Posters

- 1. Hewitt, J., Fix, M. J., Hoeting, J. A., and Cooley, D. S. Improved return level estimation via a weighted likelihood latent spatial extremes model. *ENVR Workshop: Research, Practice and Policy*, Ahseville, North Carolina. October 2018.
 - 2. Hewitt, J., Fix, M. J., Hoeting, J. A., and Cooley, D. S. Improved return level estimation via a weighted likelihood latent spatial extremes model. *Institute for Mathematics and its Applications Workshop on Frontiers in Forecasting*, Minneapolis, Minnesota. February 2018.
- 3. Bowser, G., Le Mat, A., Hewitt, J., and Wood, T. GoPollinators: Detecting pollination interactions with GoPro and Field cams. *Ecological Society of America Annual Meeting*, Portland, Oregon. August 2017.
 - 4. Hewitt, J., Hoeting, J. A., Done, J. M., and Towler, E. Remote effects spatial process models for modeling teleconnections. *Challenges in the Statistical Modeling of Stochastic Processes for the Natural Sciences*, Banff, Alberta. June 2017.
 - 5. Hewitt, J., Hoeting, J. A., Done, J. M., and Towler, E. A geostatistical model for teleconnections. *Poster session for admitted CSU statistics graduate students*, Fort Collins, Colorado. March 2017.
- 2016 6. Hewitt, J., Hoeting, J. A., Done, J. M., and Towler, E. A spatial-statistical approach to modeling teleconnections. *The* 13th *International Meeting on Statistical Climatology*, Canmore, Alberta. June 2016.
 - 7. Hewitt, J., Hoeting, J. A., and Done, J. M. Modeling climate teleconnections. *ENVR/EnviBayes Workshop on Bayesian Environmetrics*, Columbus, Ohio. March 2016.
- 2015 8. Hewitt, J., Wang, H., Leisz, S., and Fisher, C. Morphological and statistical detection of archaeological features in LIDAR imagery. *Poster session for admitted CSU statistics graduate students*, Fort Collins, Colorado. March 2015.

Teaching

Courses taught at Colorado State University

2017	Statistics for Behavioral Sciences II (STAT 312) Instructor; Spring 2017, Fall 2017
2015–2016	Introduction to Biostatistics (STAT 307) Instructor; Spring 2015, Spring 2016
2014	Introduction to Statistics (STAT 301) Instructor; Fall 2014
2013–2014	Introduction to Statistics (STAT 201) Teaching assistant; Fall 2013, Spring 2014

Honors

- 2018 1. Sustainability Leadership Fellow; School of Global Environmental Sustainability, Colorado State University.
- 2017 2. Student paper award; Section on Statistics and the Environment, American Statistical Association.
 - 3. Education and Service award; Department of Statistics, Colorado State University.
 - 4. Poster award; Department of Statistics, Colorado State University.
- 2014 5. Summer fellow; Center for Interdisciplinary Mathematics and Statistics, Colorado State University.
- 2013 6. University graduate fellowship; Colorado State University.

Travel grants

2016–2017 **STATMOS travel grants**

Funding from the NSF-supported Research Network for Statistical Methods for Atmospheric & Oceanic Sciences (STATMOS) to present research at related workshops and conferences.

2016 Rossbypalooza

Funding from the University of Chicago to attend a graduate student workshop on climate and statistics.

Service

2018 Session Chair

- Stochastic Weather Generators Conference Dynamics and Forecasting
- Joint Statistical Meetings Spatial and Spatiotemporal Modeling in Climate and Meteorology

2017–2018 Stat Alliance at Colorado State University

Co-Founder of American Statistical Association Student chapter at Colorado State University.

STATMOS liaison at Colorado State University

Liaison to CSU graduate students involved in the NSF-supported STATMOS research network.

2016–2017 Graduate teaching assistant mentor

Mentor to junior graduate student instructors at Colorado State University.

2015–2016 Student-organized activities and research seminars coordinator

Co-coordinator of student-organized seminar series at Colorado State University.