

1. Name

Matthias Fripp

2. Education

Lewis & Clark College, B.A., Environmental Studies, 1999

University of California, Berkeley, M.S., Energy and Resources, 2003

University of California, Berkeley, Ph.D., Energy and Resources, 2008

3. Academic experience

- University of Hawaii at Manoa, Assistant Professor of Electrical Engineering, 2012–present, full-time
- University of Oxford (UK), Research Fellow in Renewable Energy, 2008–2012, full-time
- University of California, Berkeley, Graduate Student Instructor (teaching assistant), 2007, part-time
- Lawrence Berkeley National Laboratory, Research Assistant, 2003–2006, part-time

4. Non-academic experience

- Union of Concerned Scientists, Consultant, 2008–2009, part-time
- Sarvodaya Shramadana Movement, Information Systems Advisor (post-tsunami volunteer), 2005, full-time
- Trexler and Associates, Inc., Chief Modeler, Information Systems Manager, 2000–2001, full-time
- 1000 Friends of Oregon, Researcher and Writer (volunteer), 1999, part-time
- Renewable Northwest Project, Summer Researcher, 1999, full-time
- Best Friends Animal Sanctuary, Membership Director, Information Systems Manager, 1991–1997, full-time

5. Certifications or professional registrations

none

6. Current membership in professional organizations

IEEE, Power & Energy Society

7. Honors and awards

- Outstanding Young Alumnus, Lewis & Clark College, 2011
- U.S. EPA Science to Achieve Results (STAR) graduate fellowship, 8/06–12/08
- U.S. NSF Doctoral Dissertation Research Improvement Grant, 3/06–8/06
- Berkeley Fellowship, University of California, Berkeley, 8/01–12/06

8. Service activities

- Helped found and continue to advise a student chapter of the National Electrical Contractors Association (NECA) at UH Manoa. (Fall 2013–present)
- Attended weekly meetings of the Renewable Energy and Island Sustainability (REIS) group; work with other members to define the role and mission of REIS and to identify strategies for raising funds to sustain REIS in the future. (Summer 2012 – present)
- Participate in meetings of the UH Manoa Sustainability Council and UH Manoa Chancellor's Energy Committee (2012–present) Represent the College and Renewable Energy and Island

Sustainability (REIS) group at meetings with delegations from China, Japan, Taiwan and S. Korea (2013–present)

- Assist in departmental ABET review process (2012–present)
- Participate in meetings with UH Manoa Electrical Engineering Industry Advisory Board (2012–present).
- Serve as a judge for College and REIS undergraduate poster competitions (2013–present).
- Attend fundraising and community events on behalf of the College (2013–present)
- Give presentations and tours at in College of Engineering Career Day events (2013–present).

9. Important publications and presentations from the past five years

| Title | Author(s) | Publisher | Year |
|--|---|---|-------------|
| Online and Batch Methods for Solar Radiation Forecasting under Asymmetric Cost Functions | SA Fatemi, A Kuh, M Fripp | IEEE Transactions on Sustainable Energy | (in review) |
| Self-Sustaining Meteorological Wireless Sensor Networks | J Carland, M Umeda, T Wilkey, A Oberbeck, J Cumming, N Parks, M Fripp, A Kuh, D Garmire | Sensors and Transducers Journal, 160(12): 118-124 | 2013 |
| Switch: a planning tool for power systems with large shares of intermittent renewable energy | M Fripp | Environmental science & technology 46 (11), 6371-6378 | 2012 |
| A life cycle assessment of biodiesel derived from the “niche filling” energy crop camelina in the USA | BJ Krohn, M Fripp | Applied Energy 92, 92-98 | 2012 |
| High-resolution modeling of the western North American power system demonstrates low-cost and low-carbon futures | J Nelson, J Johnston, A Mileva, M Fripp, I Hoffman, A Petros-Good, ... | Energy Policy 43, 436-447 | 2012 |
| Greenhouse gas emissions from operating reserves used to backup large-scale wind power | M Fripp | Environmental science & technology 45 (21), 9405-9412 | 2011 |
| Optimal investment in wind and solar power in California | M Fripp | University of California, Berkeley | 2009 |

10. Most recent professional development activities

Attended UH grantseeking workshops in Feb. 2013 and 2014.