### **CURRICULUM VITAE**

# Charles M. Schweik

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### **Degrees**:

Ph.D. (Public Policy), 1998, Indiana University, Bloomington, IN M.P.A. (Public Administration), 1991, Syracuse University, NY B.A. (Computer Science), 1984, Potsdam State University, Potsdam, NY

### **Professional Employment:**

Professor Department of Environmental Conservation and Center for Public Policy and Administration, University of Massachusetts, Amherst	2015-present
Director, Information Technology Program, UMass Amherst https://www.umass.edu/itprogram/	2023-present
<b>Associate Director</b> , UMass Amherst Public Interest Technology Initiative https://groups.cs.umass.edu/pit/	2022-2023
Interim Director School of Public Policy, University of Massachusetts, Amherst	May 2016- Sept 2017
Associate Director National Center for Digital Government, UMass Amherst	2006-2018
Associate Professor Department of Environmental Conservation and Center for Public Policy and Administration, University of Massachusetts, Amherst	2006-2015
Assistant Professor Department of Environmental Conservation and Center for	1999-2006

Public Policy and Administration, University of Massachusetts, Amherst

Postdoctoral Fellow Center for the Study of Institutions, Population and Environmental Change, Indiana University	1998-1999
Research Assistant Workshop in Political Theory and Policy Analysis and Center for the Study of Institutions, Population and Environmental Change, Indiana University	1993-1997
Research Associate Project Performance Corporation, Sterling Virginia	1991-1992
Staff Programmer, IBM Headquarters, Southbury CT	1988-1989
Senior Associate Programmer, IBM East Fishkill, NY	1984-1988

#### RESEARCH

### **Temporary Research Appointments**

- Visiting Research Faculty, BioGov: Institutional Analysis of Collective Action Arrangements for Sustainability. Université catholique de Louvain. February-April, 2015.
- Visiting Research Faculty, Nottingham Geospatial Institute, The University of Nottingham, UK. April-June, 2015.
- Visiting Research Faculty, Laboratorio di Geomatics at the Como Campus of Politecnico di Milano, Italy. July 2015.

#### **Grants**

- Since joining UMass in 1999 I have brought in approximately \$6,100,000 in sponsored research grants.
- 2022. Funding to support a workshop on Open Source Software Sustainability. Google. \$45,000. Co-PI with PIs Vladimir Filkov, Seth Frey and Brenda Bushouse.
- 2022. GCR: Collaborative Research: Jumpstarting Successful Open-Source Software Projects with Evidence-Based Rules and Structures. 3-year renewal. PIs Vladimir Filkov (UC Davis) and Charlie Schweik (UMass), co-PIs Brenda Bushouse (UMass), Seth Frey (UC Davis).
  \$2,205,938. (UMass Amherst \$794,944; UC Davis \$1,411,024) for 3 more years (2022-2025).
  NSF Awards: #2020900 and #2020751.
- 2021. The Use of Unoccupied Aerial Systems (UAS) to Assess Salt Marsh Vulnerability to Sea Level Rise. US Environmental Protection Agency. Scott Jackson, PI. C. Schweik Co-PI. \$250,000.

2020. GCR: Collaborative Research: Jumpstarting Successful Open-Source Software Projects with Evidence-Based Rules and Structures. PIs Vladimir Filkov (UC Davis) and Charlie Schweik (UMass), co-PIs Brenda Bushouse (UMass), Seth Frey (UC Davis). \$1,135,458. (UMass Amherst-\$463,919; UC Davis \$671,539) for first 2 years (2020-2022). NSF Awards: #2020900 and #2020751.

- 2019. Developing More Effective CAPS Metrics: Assessing Ecological Integrity of Salt Marshes Using UAS Technology. US Environmental Protection Agency. Scott Jackson, PI. C. Schweik Co-PI. \$125,000.
- 2019. Research Coordination Network: Coordinating and Advancing Analytical Approaches for Policy Design. NSF's Decision, Risk and Management Sciences Program. Saba Siddiki, Syracuse University, PI. Co-PI. \$461,854.
- 2018. Developing More Effective CAPS Metrics for Assessing Ecological Integrity of Salt Marshes. U.S. Environmental Protection Agency. Scott Jackson, PI. Co-PI. \$362,776.
- 2018. The Application of Unmanned Aerial Systems in Surface Transportation. \$399.998. MADOT. Mike Knodler PI. C. Schweik Co-PI.
- 2017. UMassAir: Unmanned Aerial System Research and Education Collaborative. UMass President's Office Science & Technology Initiative. \$100,000. Co-PI.
- 2017. Developing an Automated System to Extract Rule Statements from Regulatory Text. PI. Institute of Social Science Research. \$10,000.
- 2015. Web-based Geographic Information Science and Technologies. Five College Blended Learning Grant supported by the Teagle Foundation. \$23,731.
- 2014. A Proposal to Develop an Enterprise GIS-based Decision Support System for Conservation Management near Wind Energy Developments. PI. US Fish and Wildlife Service. \$35,459.53
- 2014. Public Service Endowment Grant. "Establishing a Town-Gown Makerspace to Engage Amherst Middle School Youth in STE'A'M (science, technology, engineering, arts and math). UMass Office of Research Development. Co-PI with Paula Rees (Engineering) and Steve Brewer (Biology). \$15,000.
- 2013. The Nature Conservancy. Producing a series of smartphone-based training videos to educate citizen scientists on how to identify emergent invasive pest species (contract to fund my graduate student research associate Jared Starr to develop these training videos). \$14,980.
- 2011-2013. USDA Forest Service. PI. Crowdsourcing: A "Citizen Scientists Model Using Mobile Smart Phones to Report and Map Non-Native Invasive Plant and Insect Species. \$173,413.
- 2011. National Science Foundation. PI. Support a Doctoral Consortium co-located with the 7<sup>th</sup> annual international conference on Open Source Systems (OSS2011). This also funded a second Doctoral Consortium co-located with the 8<sup>th</sup> annual conference on Open Source Systems

- (OSS2012) in Hammamet, Tunisia, 10-13 September 2012. http://www.nsf.gov/awardsearch/showAward.do?AwardNumber=1132151. **\$21,356.**
- 2010. MA Dept of Education. Co-PI. "Putting Western Massachusetts on the Map: A Course in GIS." Co-PI. Course designer and Lead Instructor in a grant to the Western MA Gateway Regional School District. \$21,356.
- 2009. Google. Sponsorship grant for our "Politics of Open Source" conference. Co-PI. (http://www.umass.edu/jitp/). \$5000.
- 2007. USDA. Forest Service. PI. Open Research System (ORS) Website Development for the Urban Natural Resources Institute and the Development of a Web-Based Interface for a "Carbon Calculator Plus Calculator." **\$19,000.**
- 2007. Commonwealth Information Technology Initiative. co-PI. "Putting Franklin County on the Map" Grant to teach and distribute GIS teaching material to high school teachers in the Mohawk Valley School District. Co-PI. (David Greenberg, Mohawk Valley School District, PI. Other partners: Technology in Education Partnership, Greenfield Community College). \$30,000.
- 2005. USDA Forest Service. Developing an Open Content Collaboration in Urban Simulation Modeling. **\$6,459**.
- 2005. USDA NRI. Managed Ecosystems program. Co-PI. "Acorn (A CoOperative Resource Network): use of the Internet to promote ecosystem-level cooperation among non-industrial private forest owners." 3 years, \$420,000. (Professor David Kittredge, PI, Thomas Stevens, and Paul Catanzaro (co-PIs). **\$420,000**.
- 2005. **NSF Faculty Early Career Development (CAREER) Grant.** "The Open Source/Content Commons as a New Paradigm for Collaborative Scientific Research: A Research and Teaching Agenda." NSFIIS 0447623. **\$497,677.**
- 2005. National Park Service. A website and data server for the National Park Service Northeast Temperate Network Inventory and Monitoring Program. Pl. **\$18,808.**
- 2004. USDA Forest Service. "Development and Management of a Web-based Research Collaboration System." 8/31/2004-5/31/2005. **\$10,000**.
- 2004. Donation from IBM to develop a new Linux Open Source teaching lab. PI. 26 desktop PCs, 1 lab server, and 2 IBM interns for 2004-5 school year. \$150,000.
- 2004. National Park Service. PI. A website and data server for the National Park Service Northeast Temperate Network Inventory and Monitoring program. PI. **\$24,332.**
- 2004. USDA Forest Service. "Investigating "Open-Source" Concepts for the Enhancement of Environmental Research." PI. \$14,000.
- 2003. USDA Forest Service. A Socioeconomic Database for Integrated Research and Assessment of Northeastern Forests Part V. PI. **\$3,990.**

2003. Northeastern States Research Cooperative program. ACORN (A CoOperative Resource Network): Use of the Internet to promote ecosystem-level cooperation among non-industrial private forest owners" Co-PI (Dave Kittredge as PI.) **\$82,900.** 

- 2002. USDA Forest Service. Incorporation of Human Drivers and Responses in Land Use Change Models for the Northeastern and North Central Research Areas. (With Tom Evans OF Indiana University). Co-PI. \$75,000
- 2002. USDA Forest Service. A Socioeconomic Database for Integrated Research and Assessment of Northeastern Forests Part IV. PI. **\$16.000.**
- 2001-2003 USDA Forest Service. "Investigating "Open-Source" Concepts for the Enhancement of Environmental Research. PI. **\$14,000.**
- 2001. USDA Forest Service. A Socioeconomic Database for Integrated Research and Assessment of Northeastern Forests Part III. PI. \$9,800.
- 2000. USDA Forest Service. A Socioeconomic Database for Integrated Research and Assessment of Northeastern Forests Part II. PI. **\$34,000.**
- 2000. Massachusetts Board of Higher Education Commonwealth Information Technology Initiative. \$10,500.
- 1999. USDA Forest Service. A Socioeconomic Database for Integrated Research and Assessments of Northeastern Forests.. PI. **\$48,281.**
- 1999. USAID, "Human Dimensions of Natural Resource Management, A Collaboration Between Indiana University (USA) and Kathmandu University (Nepal)." (PI Elinor Ostrom.).
- 1998. University of Massachusetts Faculty Research Grant. "Compliance with Habitat Conservation Plans: A Time-Series Analysis of Remote Sensing Data. (Craig Thomas, PI). \$9,465.
- 1997. Co-wrote and was awarded a grant from the Ford Foundation, New Delhi. (Elinor Ostrom PI). "Nepal Irrigation Institutions and Systems III." **\$199,397.**

#### **Books**

Internet Success: A Study of Open Source Software Commons (with Robert English). 2012.

Cambridge, MA. MIT Press. [Amazon.com page: <a href="http://tinyurl.com/d3e4545">http://tinyurl.com/d3e4545</a>.] Open access version for download at: <a href="https://works.bepress.com/charles\_schweik/29/">https://works.bepress.com/charles\_schweik/29/</a>

### Reviews and Interviews:

- David A. Wheeler's Blog (2012): <a href="http://www.dwheeler.com/blog/2012/07/08/">http://www.dwheeler.com/blog/2012/07/08/</a>
- David Bollier's Blog (2012): <a href="http://bollier.org/blog/why-do-some-software-commons-succeed-and-others-fail">http://bollier.org/blog/why-do-some-software-commons-succeed-and-others-fail</a>
- ACM's Computing Reviews (Nov, 2012): <a href="http://tinyurl.com/d5bwpcy">http://tinyurl.com/d5bwpcy</a>

• Choice: Current Reviews for Academic Libraries (Jan 2013, v50, no.5): Recommended.

- Fitz-Gerald, S. International Journal of Information (12/2012), Volume 32, Issue 6, pp. 596 597.
- Tibben, W. Prometheus: Critical Studies in Innovation, Prometheus: Critical Studies in Innovation, Volume 31, Issue 1, 2013. Pp. 79-84.
- Frischman, B. Amazon.com review.

  <a href="http://www.amazon.com/Internet-Success-Open-Source-Software-Commons/product-reviews/0262017253">http://www.amazon.com/Internet-Success-Open-Source-Software-Commons/product-reviews/0262017253</a>
- Scaria, Arul George, Book Review (May 27, 2013). Available at SSRN: http://ssrn.com/abstract=2270600
- Gordon, R. 6 Things to Know about Successful (and Failed)
   Open-Source Software. PBS.org.
   http://www.pbs.org/idealab/2013/08/6-things-to-know-about-successful-open-source-software/. August 1, 2013.
- Bradley, B., Schweik, C.M. and Smith, R. 2013. Introduction to Geographic Information Science Using ArcGIS V10. Open access lab manual. 225 pp. Made available for free to my students for my NRC585\PUBP697B GIS class. Print copy available at http://tinyurl.com/jvu5t8c

#### **Edited Volumes**

- Schweik, C.M., Zia, M. and Anderson, A. (eds.) 2017. "FOSS4G 2017 Full Conference Proceedings (papers and posters)," Free and Open Source Software for Geospatial (FOSS4G) Conference Proceedings: Vol. 17, Article 2. Available at: http://scholarworks.umass.edu/foss4g/vol17/iss1/2.
- Schweik, C.M., Stol, K. and Hammouda (eds). *Proceedings of the OSS 2012 Doctoral Consortium*. September 13, 2012. Hammamet, Tunisia. ISBN 978-952-15-2993-1. Available at <a href="http://works.bepress.com/charles-schweik/22/">http://works.bepress.com/charles-schweik/22/</a>. 2012.
- Schweik, C.M. and Hammouda, I. (eds.) 2011. *Proceedings of the OSS 2011 Doctoral Consortium*. October 5, 2011. Salvador, Brazil. ISBN 978-952-15-2722-7 Available at <a href="http://works.bepress.com/charles\_schweik/20/">http://works.bepress.com/charles\_schweik/20/</a>.
- Schweik, C.M., and Shulman, S. (eds.) 2011. "The Politics of Open Source Special Issue." With S. Shulman (eds.) *Journal of Information Technology & Politics*. 8(3) July-Sept.
- Schweik, C.M. and Shulman, S. 2010. *The Politics of Open Source Conference Proceedings*. Available at <a href="http://scholarworks.umass.edu/cgi/viewcontent.cgi?article=1000&context=jitpc2010">http://scholarworks.umass.edu/cgi/viewcontent.cgi?article=1000&context=jitpc2010</a>.

#### Papers under review or under development

Stanciulescu, S., Schweik, C.M. and Filkov, V. Under review. Quantifying the Effects of the Apache Incubator on OSS Projects. *Proceedings of the 31st ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering.* 

Ruiz, S.V., Pieper, L., Schlager, E. and Schweik, C.M. Under review. The Use of the Institutional Grammar 1.0 for Policy Analysis: A Literature Review. *International Journal of the Commons*.

# Refereed Journal Articles, Book Chapters and Invited Publications

(<u>underline</u> signifies student or post-doc advisee co-authors)

- Smajgl, A. and Schweik, C. 2022. Advancing Environmental Sustainability with Blockchain-based Incentives and Institutions. *Frontiers in Blockchain*. https://www.frontiersin.org/articles/10.3389/fbloc.2022.963766/abstract
- Yin, L. Chakraborti, M., Yan, Y., Schweik, C., Frey, S. and Filkov, V. 2022. Open Source Software Sustainability: Combining Institutional Analysis and Socio-Technical Networks. *Proc. ACM Human-Computer Interactions*. 6, CSCW2, Article 404 (November 2022), 23 pages. https://doi.org/10.1145/3555129
- Sen, A., Atkisson, C., & Schweik, C. 2022. Cui Bono: Do Open Source Software Incubator Policies and Procedures Benefit the Projects or the Incubator? *International Journal of the Commons*, 16(1), pp. 64–77. DOI: https://doi.org/10.5334/ijc.1176
- Frey, S., Zhong, Q., Bulat, B., Weisman, W.D., Liu, C., Fujimoto, S., Wang, H.M. and Schweik, C.M. 2022 Governing online goods: Maturity and formalization in Minecraft, Reddit, and World of Warcraft communities. *Proc. ACM Human-Computer Interactions*, 6, CSCW2, Article 300 (November 2022), 25 pages, <a href="https://doi.org/10.1145/3555191">https://doi.org/10.1145/3555191</a>
- Bushouse, B., Schweik, C.M., Siddiki, S., Rice, D., and Wolfson, I. 2021. "The Institutional Grammar: A Method for Coding Institutions and its Potential for Advancing Third Sector Research." *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations*.
- Schweik, C.M., Meyer, C., <u>Chinkondenji, P.</u>, Smith, J. and <u>McHenga, P.</u> 2020. World Librarians: A Socio-Technical System Providing Library Search Services to Offline Schools and Libraries in Malawi. *World Development Perspectives*. <a href="https://doi.org/10.1016/j.wdp.2020.100234">https://doi.org/10.1016/j.wdp.2020.100234</a>.
- Schweik, C.M. 2019. The Untapped Potential of Making and Makerspaces. *Inside Higher Education*. May 15. Available at https://www.insidehighered.com/views/2019/05/15/four-ways-highereducation-could-make-more-making-and-makerspaces-opinion.
- Schweik, C. and <u>Gunther-Segal, M.</u> 2019. "Presenting Events of the 'World Commons Week'", The Commons Digest. No. 21. Available at https://www.iasc-commons.org/commons-digest/.
- Myers, D., Schweik, C.M., Bowlick, F., Wicks, R. and Carullo, M. 2018. "Developing a Land Cover Classification of Salt Marshes Using Unmanned Aerial Systems Imagery and an Open Source Workflow", *International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences*. Available at https://www.int-arch-photogramm-remote-sens-spatial-inf-sci.net/XLII-4-W8/155/2018/.
- Schweik, C., Smith, J. and Meyer, C. 2018. World Librarians: A Peer-to-Peer Commons for Closing the Digital Divide. *Journal of Librarianship and Scholarly Communication*. Available at https://jlsc-pub.org/articles/abstract/10.7710/2162-3309.2249/.

Schweik, C.M, Rees, P., Brewer, S., <u>Olson, C., Smoliga, D.</u> 2015. Applications in Do-It-Together, Environmental Monitoring Technologies - Student Projects from an Interdisciplinary, Flipped, Service Learning, Makerspace Course. Proceedings of the American Society of Engineering Education's Annual Conference, Seattle Washington, June 14-17, 2015. Available at <a href="http://www.asee.org/public/conferences/56/papers/13520/view.">http://www.asee.org/public/conferences/56/papers/13520/view.</a>

- Rees, P., Olson, C., Schweik, C.M, and Brewer, S. 2015. Work in Progress: Exploring the Role of Makerspaces and Flipped Learning in a Town-Gown Effort to Engage K12 Students in STEAM. Proceedings of the American Society of Engineering Education's Annual Conference, Seattle Washington, June 14-17, 2015. Available at <a href="https://peer.asee.org/work-in-progress-exploring-the-role-of-makerspaces-and-flipped-learning-in-a-town-gown-effort-to-engage-k12-students-in-steam">https://peer.asee.org/work-in-progress-exploring-the-role-of-makerspaces-and-flipped-learning-in-a-town-gown-effort-to-engage-k12-students-in-steam</a>.
- Starr, J., Schweik, C.M., Bush, N., Fletcher, L., Finn, J., Fish, J. and Bargeron, C. 2014.
  Lights, Camera...Citizen Science: Assessing the Effectiveness of Smartphone-Based Video Training in Invasive Plant Identification. PLoS ONE 9(11): e111433.
  doi:10.1371/journal.pone.0111433. Available at:
  http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0111433
- Schweik, C.M., 2014. "Reflections on Being an Elinor Ostrom "Senior Scholar" Recipient. The Commons Digest. Spring 2014, No 15. Available at: <a href="http://www.iasc-commons.org/sites/default/files/cd15.pdf">http://www.iasc-commons.org/sites/default/files/cd15.pdf</a>.
- Schweik, C.M., 2014. "Toward the Comparison of Open Source Commons Institutions." Chapter 7 in Frischman, B., Madison, M., and Strandburg, K. (eds.) Governing Knowledge Commons. New York: Oxford University Press.
- Schweik, C.M and English, R. 2013. "Preliminary Steps Toward a General Theory of Internet-Based Collective-Action in Digital Information Commons: Findings from a Study of Open Source Software Projects. International Journal of the Commons. 7(2). Available at:

  <a href="http://www.thecommonsjournal.org/index.php/ijc/article/view/URN%3ANBN%3ANL%3AUI%3A10-1-114926">http://www.thecommonsjournal.org/index.php/ijc/article/view/URN%3ANBN%3ANL%3AUI%3A10-1-114926</a>
- Mitasova, H. and Schweik, C.M. 2013. "Building a World Wide Network for Open Source Geospatial Education." *GIM International*. August.
- Schweik. C.M. 2013, Sustainability in Open Source Software Commons: Lessons Learned from an Empirical Study of Open Source Projects." *Technology Innovation Management Review*. January. Available at <a href="http://timreview.ca/issue/2013/january">http://timreview.ca/issue/2013/january</a>.
- Schweik., C.M. and Miller, L. 2013. "The Adoption of Technology Open Standards Policy by the Commonwealth of Massachusetts". 2013 Maxwell School E-PARCC Collaborative Governance Initiative Teaching Case competition. Case was peer reviewed by a committee of academics and practitioners in a blind peer review process, and is made available on the E-PARCC open access website (<a href="http://www.maxwell.syr.edu/parcc/eparcc/Cases\_Main\_Page/">http://www.maxwell.syr.edu/parcc/eparcc/Cases\_Main\_Page/</a>).

Billings, M., Hutton, S., Schafer, J., Schweik, C.M., and Sheridan, M. 2012. "Open Educational Resources as Learning Materials: Prospects and Strategies for University Libraries." *Research Library Issues* 280(1). September. Available at http://publications.arl.org/rli280/.

- Schweik, C.M., 2012. "The Paradox of the Interactive Web in the U.S. Public Sector." With Ines A. Mergel. In *Public Service, Governance and Web 2.0 Technologies: Future Trends in Social Media*. IGI Global. 266-289.
- Schweik, C.M., Mergel, I., Sandfort, J. and Zhao, Z. 2011. "Toward Open Public Administration Scholarship." *Journal of Public Administration Theory and Research*. 21: i175-i198.
- Schweik, C.M. 2011. Guest Editor Introduction. Special issue on the 'Politics of Open Source.' *Journal of Information Technology and Politics*.
- Schweik, C.M., English, R., Pajenjton, Q. and Haire, S. 2010. "Success and Abandonment in Open Source Commons: Selected Findings from an Empirical Study of Sourceforge.net Projects." Proceedings of the Sixth International Conference on Open Source Systems (OSS 2010) Workshops. Notre Dame, IN, USA. June 2. Available at <a href="http://works.bepress.com/charles-schweik/17/">http://works.bepress.com/charles-schweik/17/</a>.
- Schweik, C.M and <u>Kitsing, M.</u> 2010. "Applying Elinor Ostrom's Rule Classification Framework to the Analysis of Open Source Software Commons." *Journal of Transnational Corporations Review*. Available at <a href="http://www.tnc-online.net/pic/2010032809124697.pdf">http://www.tnc-online.net/pic/2010032809124697.pdf</a>.
- Schweik, C.M., <u>English, R.</u> and Haire, S. 2009. "Factors Leading to Success or Abandonment of Open Source Commons: An Empirical Analysis of Sourceforge.net Projects." *South African Computer Journal*. Vol. 43. <a href="http://journals.sabinet.co.za/comp/">http://journals.sabinet.co.za/comp/</a>. Preprint available at <a href="http://works.bepress.com/charles-schweik/15/">http://works.bepress.com/charles-schweik/15/</a>.
- Schweik, C.M and <u>Hamel, M.</u> 2009. "Open-Source Collaboration: Two Cases in the U.S. Public Sector." *First Monday 14(1)*. <a href="http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/2313/2065">http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/2313/2065</a>.
- Schweik, C.M., <u>Fernandez</u>, M., <u>Hamel</u>, M., Kashwan, P. <u>Lewis, Q.</u>, and <u>Stepanov</u>, A. 2009. "Reflections of an Online Geographic Information Systems Course based on Open Source Software." *Social Science Computer Review*. http://ssc.sagepub.com/content/vol27/issue1/.
- Nagendra, H., Pareeth, S., Sharma, B., Schweik, C.M and Adhikari, K. 2008. "Forest Fragmentation and Regrowth in an Institutional Mosaic of Community, Government and Private Ownership in Nepal. *Landscape Ecology*. 23(1) January.
- Schweik, C.M., English, R., Kitsing, M. and Haire, S. 2008. "Brooks' versus Linus' Law: An Empirical Test of Open Source Projects" In Soon Ae Chun, Marijn Janssen and Ramon Gil-Garcia (eds.) *The Proceedings of 9th International Digital Government Research Conference*, Montreal, Canada, May 18-21, pp. 423-424. Available at <a href="http://portal.acm.org/citation.cfm?id=1367832.1367924">http://portal.acm.org/citation.cfm?id=1367832.1367924</a>.

Schweik, C.M. and English, R. 2007. "Identifying Success and Abandonment of Free/Libre and Open Source (FLOSS) Commons: A Preliminary Classification of Sourceforge.net projects." *Upgrade: The European Journal for the Informatics Professional*. Vol. VIII, Issue no. 6 (December). Available at <a href="http://www.cepis.org/upgrade/files/full-VI-07.pdf">http://www.cepis.org/upgrade/files/full-VI-07.pdf</a>.

- Schweik, C.M. and English, R. 2007. "Conceptualizing the Institutional Designs of Free/Libre and Open Source Software Projects." *First Monday* 12(2). Available at http://www.firstmonday.org/issues/issue12 2/schweik/index.html.
- Schweik, C.M. 2007. "Free / Open Source Software as a Framework for Scientific Collaboration" In Hess, Charlotte, and Elinor Ostrom, eds. *Understanding Knowledge as a Commons: From Theory to Practice*. Cambridge, Mass: MIT Press.
- Schweik, C.M. and English, R. 2007. "Identifying Success and Tragedy of Free/Libre and Open Source (FLOSS) Commons: A Preliminary Classification of Sourceforge.net projects." *Proceedings of the First International Workshop on Emerging Trends in FLOSS Research and Development*, 20-26 May, Minneapolis, Minnesota.
- Finely, A.O., Kittredge, D.B., Stevens, T.H., Schweik, C.M., and Dennis, D. 2006. "Possibilities for cross-boundary cooperation in a landscape dominated by private ownership: a case study from Massachusetts," *Forest Science*. 52(1): 10-22.
- Schweik, C.M. 2005. "An Institutional Analysis Approach to Studying Libre Software "Commons". *Upgrade: The European Journal for the Informatics Professional*. June. pp 17-27. <a href="http://www.upgrade-cepis.org/issues/2005/3/up6-3Schweik.pdf">http://www.upgrade-cepis.org/issues/2005/3/up6-3Schweik.pdf</a>. (Spanish version available at <a href="http://www.ati.es/novatica/">http://www.ati.es/novatica/</a>).
- Belin, D.L., Kittredge, D.B., Stevens, T.H., Dennis, D., Schweik, C.M., and Morzuch, B.J. 2005. "Assessing Private Forest Owner Attitudes Toward Ecosystem-based Management." With D.L. Belin, D.B. Kittredge, T.H. Stevens, D.C. Dennis and B.J. Morzuch. *Journal of Forestry*. January/February. pp. 28-35.
- Schweik, C.M., Evans, T. and Grove, J.M. 2005. "Open Source and Open Content: a Framework for Global Collaboration in Social-Ecological Research." *Ecology and Society* 10 (1): 33. [online] URL: http://www.ecologyandsociety.org/vol10/iss1/art33/. 25 pp.
- Schweik, C.M., Stepanov, A., and Grove, J.M. 2005. "The Open Research System: A Web-based Metadata and Data Repository for Collaborative Research." *Computers and Electronics in Agriculture*. 47. pp. 221-242.
- Schweik, C.M., Green, G. and Randolph, J.C. 2005. "Linking Disciplines across Space and Time: Useful Concepts and Approaches for Land-Cover Change Studies." In *Seeing the Forest and the Trees: Human-Environment Interactions in Forest Ecosystems*, ed. Emilio F. Moran and Elinor Ostrom. pp. 61–80. Cambridge, Mass.: MIT Press.
- Schweik, C.M., Green, G. and Randolph, J.C. 2005. "Retrieving Land-Cover Change Information from Landsat Satellite Images by Minimizing Other Sources of Reflectance Variability." In *Seeing the*

- Forest and the Trees: Human-Environment Interactions in Forest Ecosystems, ed. Emilio F. Moran and Elinor Ostrom. pp. 131–160. Cambridge, Mass.: MIT Press.
- Osterweil, L.J., Schweik, C.M., Sondheimer, N.K. and Thomas, C.W. 2004. "Analyzing Processes for E-Government Development: The Emergence of Process Modeling Languages." *Journal of E-Government*. 1(4). pp. 63-87.
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### Non-reviewed Publications, Op-eds and Reports:

(underline signifies student co-authors)

- Ford, T. and Schweik, C. 2021. The Cold Supply Chain Can't Reach Everywhere That's a Big Problem for Equitable COVID-19 Vaccination. The Conversation. January 4<sup>th</sup>. <a href="https://theconversation.com/the-cold-supply-chain-cant-reach-everywhere-thats-a-big-problem-for-equitable-covid-19-vaccination-152057">https://theconversation.com/the-cold-supply-chain-cant-reach-everywhere-thats-a-big-problem-for-equitable-covid-19-vaccination-152057</a>. 19,265 reads as of January 5<sup>th</sup>, 2021,
- Schweik, C. and Ford, T. 2020. Covid-19 Vaccines: Open Source Licensing Could keep Big Pharma from Making Huge Profits Off Taxpayer-funded Research. *The Conversation*. September 18th, 2020. <a href="https://theconversation.com/covid-19-vaccines-open-source-licensing-could-keep-big-pharma-from-making-huge-profits-off-taxpayer-funded-research-145898">https://theconversation.com/covid-19-vaccines-open-source-licensing-could-keep-big-pharma-from-making-huge-profits-off-taxpayer-funded-research-145898</a>. 13,270 reads as if Jan 5, 2021.
- Chen, D., Xie, Y., Li, T., Qiu, H. and Schweik, C. 2020. The Application of Unmanned Aerial Systems in Surface Transportation. Final Report: Volume II-D. Development of UAS Emergency Service Drone Network for Use in Surface Transportation. Client: MA Dept of Transportation.
- Schweik, C. and <u>Gunther-Segal, M.</u> 2019. Presenting events of the "World Commons Week". *The Commons Digest*. Winter, No. 21.
- Schweik, C.M. 2012. "The OSGeo Education and Curriculum Project 2012 Annual Report." OSGeo Journal. Volume 11. http://journal.osgeo.org/index.php/journal.

Scacchi, W., Crowston, K., Jensen, C., Madey, G., Squire, M., Alspaugh, T., Gasser, L., Hissam, S., Kanomata, Y., Ekbia, H., Wei. K. and Schweik, C.M. 2010. *Towards a Science of Open Source Systems*. With Final report prepared for the Computing Community Consortium (CCC). October. Available at <a href="http://www.ics.uci.edu/~wscacchi/ProjectReports/CCC-FOSS-FinalReport-29Nov10.pdf">http://www.ics.uci.edu/~wscacchi/ProjectReports/CCC-FOSS-FinalReport-29Nov10.pdf</a>.

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- Schweik, C.M., <u>Roth, D.</u> and Fulop, J. 2005. "What is Meant by 'Decision-Making' in the Context of Eco-Informatics?" Paper presented for inclusion of final report of the Workshop on Biodiversity and Ecoinformatics, Evergreen State College, December 13-15, 2004.. <a href="http://www.evergreen.edu/bdei/documents/decisionmakingsummary.pdf">http://www.evergreen.edu/bdei/documents/decisionmakingsummary.pdf</a> 6 pp. 2005.
- Cushing, J.B., Wilson, T., Brandt, L., Gregg, V., Spengler, S., Borning, A., Bowker, G., Frame, M., Fulop, J., Hert, C., Hovy, E., Jones, J., Landis, E., Schnase, J.L., Schweik, C.M. and Sonntag, W. 2005. "Eco-Informatics for Decision-Makers: Advancing a Research Agenda." In Data Integration in the Life Sciences, Second International Workshop, DILS 2005, San Diego, July 18-20, 2005 proceedings. Series: Lecture Notes in Computer Science Subseries: Lecture Notes in Bioinformatics. Raschid, L. and Ludaescher, B. (Ed.) 10 pp. <a href="http://www.evergreen.edu/bdei/documents/dils2005.pdf">http://www.evergreen.edu/bdei/documents/dils2005.pdf</a>
- Agarwal, C., Green, G.M., Grove, J.M., Evans, T.P., and Schweik, C.M. 2002. *A Review and Assessment of Land-Use Change Models: Dynamics of Space, Time, and Human Choice*. CIPEC Collaborative Report No.1. USFS Publication NE-GTR-297 Joint publication by the Center for the Study of Institutions, Population and Environmental Change at Indiana University-Bloomington and the USDA Forest Service. Burlington, Vt.: USDA Forest Service Northeastern Forest Research Station. Available at <a href="http://www.fs.fed.us/ne/newtown\_square/publications/technical\_reports/pdfs/2002/gtrne297.pdf">http://www.fs.fed.us/ne/newtown\_square/publications/technical\_reports/pdfs/2002/gtrne297.pdf</a>. 61 pp. 2002.
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- Israel, W. and Schweik, C.M. 2000. "The Information Technology Program at the University of Massachusetts, Amherst." With B. Israel. @ OIT. University of Massachusetts, Amherst.
- Schweik, C.M. 1998. *The Spatial and Temporal Analysis of Forest Resources and Institutions*. PhD Dissertation, Indiana University, Bloomington, IN.

Schweik, C.M. 1998. "The Spatial Analysis of Natural Resources in East Chitwan, Nepal: Conceptual Issues and a Multi-Scale Research Program." In G. Shivakoti, et al. (Eds.) People and Participation in Sustainable Development: Understanding the Dynamics of Natural Resource Systems. Proceedings of an international conference held at the Institute of Agriculture and Animal Science, Rampur, Chitwan, Nepal, March 17-21, 1996. pp. 219-34.

- Schweik, C.M., Adhikari, K.R., and Pandit, K.N. 1997. "Integration of GIS and GPS Techniques in Irrigation and Forest Resources Mapping: Lessons Learned." With K.R. Adhikari and K.N. Pandit. In G. Shivakoti, et al. (Eds.) People and Participation in Sustainable Development: Understanding the Dynamics of Natural Resource Systems. Proceedings of an international conference held at the Institute of Agriculture and Animal Science, Rampur, Chitwan, Nepal, March 17-21, 1996. pp. 191-204.
- Schweik, C.M. 1996. "Social Norms and Human Foraging: An Investigation into the Spatial Distribution of *Shorea robusta* in Nepal." Food and Agriculture Organization Working Paper Series: Forest Trees and People Program. Phase II.
- Huckfeldt, S., Ostrom, E., Wertime, M.B. and Schweik, C.M. 1994. A Relational Archive for Natural Resources Governance and Management. In A. Singh (ed.) *Proceedings of the UNEP and IUFRO International Workshop in Cooperation with FAO on Developing Large Environmental Databases for Sustainable Development*. July 14-16. Nairobi, Kenya. Sioux Falls, SD: UNEP.

### **Invited Keynotes and Plenary Presentations**

- Schweik, C. 2022. Commons-based Peer Production for Rural Revitalization and Sustainability. Invited Keynote presentation at the 2022 China Commons Workshop, School of Public Policy and Management (SPPM) at Tsinghua University, Beijing, China. September 24th. https://china.iasc-commons.org/2022ccw-news-english/.
- Schweik, C.M. "Reflections on Open Source Software and Open Science Peer Production." Invited plenary presentation at the Seventh International Workshop on Network Theory: Peer Production Networks. Northwestern University. October 29-31, 2015. http://sonic.northwestern.edu/news/events/ann-sonic-nico-2015/.
- "Internet-based Collaboration in Open Source Software" Plenary address. 9<sup>Th</sup> Annual International Conference on Technology, Knowledge and Society. Vancouver, CA. January 14, 2013.
- "Successful Internet Collaboration: A Study of Open Source Commons" invited plenary presentation. 7th International Conference on Open Source Systems. Salvador, Brazil. October 6, 2011.
- "Successful Internet Collaboration: A Study of Open Source Commons." Keynote at the 3<sup>rd</sup> annual Military Open Source Conference (Mil-OSS). Georgia Tech University, August 31. 2011.

### **Awards**

Recipient of the first "Elinor Ostrom Award for Senior Scholars on Collective Governance of the Commons (<a href="http://elinorostromaward.org">http://elinorostromaward.org</a>). Ostrom was the first woman to win the Nobel Prize in Economics (2009) for her work on the study of the commons. Awarded at the 14<sup>th</sup> Annual International Association for the Study of the Commons, Mt. Fuji, Japan. June. <a href="http://elinorostromaward.org/2013-Award-Results">http://elinorostromaward.org/2013-Award-Results</a>. \$10,000 prize. 2013.

- Nominated for research recognition at the University of Massachusetts Fall Faculty Convocation for Outstanding Research and Creative Activity. 2014, 2013, 2005.
- NSF CAREER Grant (see above under grants). The following text is taken directly from the NSF program webpage (<a href="http://www.nsf.gov/home/crssprgm/career/">http://www.nsf.gov/home/crssprgm/career/</a>): "The Faculty Early Career Development (CAREER) Program is a Foundation-wide activity that offers the National Science Foundation's most prestigious awards in support of the early career-development activities of those teacher-scholars who most effectively integrate research and education within the context of the mission of their organization." 2005.
- Dissertation nominated for the American Political Science Association Harold D. Lasswell Award (best dissertation in the field of Policy Studies.) 1999.
- IBM Excellence Award for distinguished work while employed as a programmer and project leader, IBM headquarters, Southbury CT. 1989.

IBM Division Award for Innovation. 1989.

### **International Research Networks Established**

- Co-founder. Institutional Grammar Research Initiative. <a href="https://institutionalgrammar.org/">https://institutionalgrammar.org/</a>. IGRI convenes scholars from around the world who are interested in the study and practice of institutional analysis. Core foci of the IGRI are theoretical and methodological advancement of the Institutional Grammar, proposed by Sue Crawford and Elinor Ostrom (1995).
- GeoForAll.org. Co-founder. A network of over 100 (as of November, 2015) Open Source Geospatial Laboratories and Research Centers across the world supporting the development of open-source geospatial software technologies, research, training and expertise.
- Knowledge-Commons.net. Co-founder. The Workshop on Governing Knowledge Commons is a collaborative, interdisciplinary research project based on studying cases of commons governance for knowledge and information resources.

### **Videos and Television**

My World Librarians project was highlighted in a BBC World Service program called "People Fixing the World" that reached, the reporter told me, ~100 million people. <a href="https://www.bbc.co.uk/sounds/play/p08vgmnv">https://www.bbc.co.uk/sounds/play/p08vgmnv</a>? (BBC, 10/20/20). Segment starts around minute 19:35.

Schweik, C. and students. "Makers@Amherst Media: Maker Class Presentations 12-14-2015" part of the "Makers @ Amherst Media" cable access and web series. Amherst Media, Cable Access Channel

12. 5 January 2016. <a href="https://amherstmedia.org/content/makers-amherst-media-makers-class-presentations-12-14-15">https://amherstmedia.org/content/makers-amherst-media-makers-class-presentations-12-14-15</a>

Schweik, CM., Frischman, B., Strandburg, K. and Madison, M. 2014. **Commons in Action** – **Knowledge Commons.** The International Association for the Study of the Commons. Available at: <a href="http://www.iasc-commons.org/blog/commons-action-new-video-knowledge-commons">http://www.iasc-commons.org/blog/commons-action-new-video-knowledge-commons</a>.

Outsmart Invasive Species identification training videos. 2013-14. Hemlock Wooly Adelgid, Winter Moth, Gypsy Moth, Emerald Ash Borer, Asian Longhorned Beetle, Polyphagous Shot Hole Borer, Goldspotted Oak Borer, Thousand Cankers Disease, Exotic Honeysuckle, Japanese Knotweed, Multiflora Rose, Glossy Buckthorn, Autumn Olive and an Outsmart Invasive Species project PSA. Developed by my graduate student Jared Starr under my USDA Forest Service grant 11-DG-11420004-294. Available at: <a href="https://www.youtube.com/user/OutsmartProject">https://www.youtube.com/user/OutsmartProject</a>

#### **Presentations and Working Papers**

(underline signifies student co-authors)

- Carl Meyer, Wachira Warukira, Sarah Hutton and Charlie Schweik. 2021. World Librarians: A System Providing Open Educational Resources to Offline Schools in Malawi and Kenya. Open Education Conference. October 19, 20212. Online. https://opened21.sched.com/
- Invited panelist (with Tim Ford and Jennie Ward-Robinson) on Covid-19 vaccine production, global equity and open source. Part of the "Don't waster the Covid-19 Crisis: Reflections on resilience and the commons revealed by covid-19. Hosted by IASC and CBIE at Arizona State University. 9/28/20
- Schweik, C., Meyer, C., Smith, J., McCullough, S., McHenga P., Chinkondenji, P., Bermingham, D., Leland, B., Eisner, P., and Cross, M. 2019. "World Librarians: A Socio-Technical System Providing Library Search Services to Offline Schools and Libraries in Malawi." Paper presentation at the 4<sup>th</sup> Annual ARNOVA-Africa/AROCSA Conference, Strathmore University, Nairobi, Kenya. July 23. Also gave 30 minute demo to a full house on the project.
- Schweik, C. 2019. "Global Peer Production on Institutional Grammar Research." Paper presentation at the 17th Global Conference of the International Association for the Study of Common Property. Pontifica Universidad Catolica del Peru, Lima, Peru. July 1-5, 2019.
- Schweik, C., Meyer, C., Smith, J., McCullough, S., McHenga P., Chinkondenji, P., Bermingham, D., Leland, B., Eisner, P., and Cross, M. 2019. "World Librarians: A Socio-Technical System Providing Library Search Services to Offline Schools and Libraries in Malawi." Paper presentation at the 17th Global Conference of the International Association for the Study of Common Property. Pontifica Universidad Catolica del Peru, Lima, Peru. July 1-5, 2019.
- Schweik, C. 2018. "The Untapped Potentialities of Making and Makerspaces in Higher Education." Selected presentation at the International Makerfaire, New York, New York. September 22<sup>nd</sup>. https://makerfaire.com/maker/entry/68128/

Schweik, C. and Meyer, C. 2018. "World Librarians and Cameroon." Invited presentation at the 2<sup>nd</sup> Annual MBOG LIAA meeting, Washington D.C. (MBOG LIAA is a worldwide association of people from Cameroon working to improve Cameroon.

- Schweik, C., S. McCullough and N. Nandgopal. 2018. "World Librarians: A Librarian Research Service for RACHEL-offline Users." Invited presentation at UNESCO's Mobile Learning Week. Paris, France. April 28<sup>th</sup>.
- Schweik, C. and R. Wicks. 2018. "An Introduction to Using Unmanned Aerial Systems (UAS) to Inventory Forest Resources." Invited presentation at the 39th Annual UMass Community Tree Conference, University of Massachusetts, Amherst. March 5<sup>th</sup>.
- Schweik, C. 2017. "Can we Incubate Education and Research Projects in GeoForAll?" Invited GLOBAL webinar to the international GeoForAll community (http://www.geoforall.org/webinars/). November 10th. Available at https://youtu.be/dVCDME7cxUA.
- Schweik, C., and R. Wicks. 2017. UAS's (Drones) and urban forestry: An introduction to their application. [Archived presentation]. Access at <a href="http://www.urbanforestrytoday.org/videos.html">http://www.urbanforestrytoday.org/videos.html</a>. Approximately 150-200 attended this international webinar.
- Schweik, C.M. and Stepanov, S. 2017. "Building an open access 'spatial data management and integration' course for the world based on Common-based Peer Production principles." Presentation at the Free and Open Source for Geospatial (FOSS4G) 2017 global conference, Boston, MA. August, 18.
- Schweik, C.M. and R. Moreno. 2017. "Facilitators and inhibitors for the integration and use of Free and Open Source Software for Geospatial Applications (FOSS4G) in Universities and Government Organizations in the United States of America." Presentation at the International Association for the Study of the Commons bi-annual conference, Utrecht, the Netherlands, July 11, 2017.
- Schweik, C.M., <u>Srivastava, S.</u>, Smith, J., <u>Nandgopal, N.</u>, Meyer, C., Richard, T. and Schwartz, J. 2017. "A Peer-to-Peer Commons for Closing the Digital Divide." Paper presented at the International Association for the Study of the Commons bi-annual conference, Utrecht, the Netherlands, July 11, 2017.
- Srivastava, S., Nandgopal, N. and Schweik, C.M. 2017. "UMass World Librarians, World Possible and Outreach to Libraries in Malawi." Demonstration at the UMass Information Technology Summit. March 24. UMass Amherst.
- Schweik, C.M. 2017. "Commons-based Peer Production and Open Science\Making at UMass Amherst". Invited presentation at the UMass Information Technology Summit. March 24. UMass Amherst.
- Schweik, C. 2016. "Commons-based Peer Production and Small Scale Sensors". Invited presentation at the Air Sensors Everywhere Small Sensors Symposium. York, UK. October 13-14.

Schweik, C. 2016. "Open Science and Making at UMass Amherst". Invited presentation at the NSF Practitioner Workshop on Hands-on Learning. June 15-16, 2016. Online web conference. (Paid participant). Video and presentation. Video available at: https://www.youtube.com/watch?v=7l24tJG2DtQ

- Engelbourg, S., Fortunato, R., Schweik, C. and Wicks, R. 2016. Unmanned Aerial Systems and Invasive Species Mapping. Invited Plenary Presentation at the Refuge Biological Workshop, National Conservation Training Center, US Fish and Wildlife Service. Sheperdstown, West Virginia.
- Fortunato, R. and Schweik, C. 2016. Unmanned Aircraft Systems and Invasive Species Mapping. Invited webinar presentation at the Annual meeting of the US Fish and Wildlife Service National Invasives Coordinators and IPM (Integrative Pest Management) coordinators. January 26.
- Engelbourg, S., Wicks, R., Schweik, C., Fortunato, R., McLeod and Beals, T. 2015. Unmanned Aerial Vehicles and Invasive Species Mapping. Presentation at the 2016 Massachusetts Envirothon kick-off event. University of Massachusetts, Amherst. November 5.
- Schweik, C.M., Barry, L. D'Ignazio, C., and Gehrke, G. 2015. "Commons-based Peer Production, Open Science and 'Small Data'. Paper presented at the American Political Science Association conference panel on Governance of New Technologies. San Francisco, CA.
- Schweik, C.M., Rees, P., Brewer, S., <u>Olson, C.</u>, <u>Smoliga, D.</u>, <u>Pongratz, L.</u>, J. Lescault, N. Ring. 2015. "Maker Activities in Higher Education and K12." Invited booth on UMass and our 'Makers@AmherstMedia' town-gown collaboration at the US National Makerfaire, Washington, D.C. June 12-13, 2015. http://nationalmakerfaire.com/call-for-makers/.
- Schweik, CM. January 29, 2015. Invited speaker on panel on "Low Cost Instrumentation and Sensors for Citizen Science/Crowdsourcing" in a Federal Community of Practice on Crowdsourcing and Citizen Science (Group webpage: http://www2.epa.gov/innovation/federal-community-practice-crowdsourcing-and-citizen-science).
- Starr, J. Fletcher, L., Bush, N., Schweik, C. September 7-11, 2015 (accepted for exhibition). Multiple Invasive Species ID Videos. Fourteenth World Forestry Congress. Durban, South Africa.
- Starr, J. Fletcher, L., Bush, N., Schweik, C. October 29-31, 2014 (accepted for exhibition). Multiple Invasive Species ID Videos. Expo Forestal, Guadalajara, Jalisco, Mexico.
- Starr, J. Fletcher, L., Bush, N., Schweik, C. October 5-11, 2014. *Multiple Invasive Species ID Videos*. Twenty-Fourth International Union of Forest Research Organizations World Congress. Salt Lake City, Utah.
- Bush, N., Fletcher, L., Starr, J., Schweik, C., Finn, J., Bargeron, C. "Lights, Camera...Citizen Science! Using smartphones and video for invasive species ID training." Poster session presented at: Invasive Plants 2014: Where Are We Now? 7th Biennial Connecticut Invasive Plant Working Group Symposium; 2014 Oct 7th; University of Connecticut, Storrs, CT.

The Outsmart Invasive Species Project. USDA Forest Service invitation to highlight the project at the IUFRO World Congress, Salt Lake City, Utah, in the US Pavilion. October, 2014.

- Knowledge Commons activities at the University of Massachusetts, Amherst. Workshop on the Workshop 5 conference, Indiana University, Bloomington Indiana. June 20, 2014.
- Lights, Camera...Citizen Science! Assessing the Effectiveness of Video-Based Training in Invasive Plant Identification (with Lena Fletcher (presenter), Jared Starr, Nathan Bush, and Jack Finn). New England Natural History Conference, Springfield, MA. April 8, 2014.
- Lights, Camera...Citizen Science! Using Smartphones and video for invasive species ID training (with <u>Jared Starr</u> (presenter), <u>Nathan Bush</u>, <u>Lena Fletcher</u>, and Jack Finn. The Nature Conservancy Northeast Region Stewardship Conference, Warwick, RI, March 27, 2014.
- The Importance of Open Source Geospatial Labs in Widening Geospatial Education Worldwide. Sept 20, 2013. FOSS4G Nottingham. (with Suchith Anand, University of Nottingham and Helena Mitasova North Carolina State University)
- "Building a Geospatially Competent Workforce with FOSS4G." Free and Open Source Software for Geospatial Conference, Minneapolis, MN. May 22, 2013 (with Phil Davis, Rick Smith and Mark Guizlo)
- "The International ICA-OSGeo Research and Education Lab Network A Status Report." Free and Open Source Software for Geospatial Conference, Minneapolis, MN. May 22, 2013.
- "The Outsmart Invasive Species Early Detection System and Related Research Studies." With <u>Nate Bush</u>, Jack Finn, <u>Lena Fletcher</u>, <u>Jared Starr</u>. Presentation at the Northeast Natural History Conference, Springfield MA, April 13-15. 2013.
- Panel participant on "Open Science." UMass Amherst Information Technology Summit, Campus Center Auditorium. March 28, 2013.
- "Outsmarting Invasive Species: Smartphone Crowdsourcing and Collaborative Environmental Management." With MacDonald, B., Kierstead, M., Bush, N., Fletcher, L., and Fish, J. Paper presented at the Association for Public Policy Analysis and Management (APPAM) conference, November 9th, Baltimore, MD. 2012.
- Outsmart Invasive Species: Outreach and Research on Citizen Engagement in Invasive Species Monitoring. Poster presentation. With S. Berkman, N. Bush, L. Fletcher, M. Kierstead, S. Libby, B. MacDonald, J. Starr, J. Fish. Connecticut Invasive Plant Working Group Symposium. University of Connecticut, Storrs, CT. October 25, 2012.
- "Toward a General Theory of Internet-based collective-action in Digital Information Commons: Findings from a Study of Open Source Software Projects. Paper presented at the 1<sup>st</sup> thematic conference of the International Association for the Study of the Commons on "Knowledge Commons." September 12-14, 2012. Louvain-la-Nenue, Belgium.

"The UMass-Amherst Open Education Initiative – A Faculty Perspective." Panel presentation. Association of College and Research Libraries, New England Chapter. College of the Holy Cross, Worcester, MA. 2012.

- "Reflections on Open Scholarship." Invited participant in the panel on "Open Scholarship: The Impact on Research, Teaching and Learning." Association of Research Libraries conference, Chicago, May 3<sup>rd</sup>. Presentation available at http://prezi.com/\_xcbnv1esiwy/arl-open-scholarship-panel-presentation/. As of Aug 16, 2013 it had 440 views. 2012.
- "Successful Internet Collaboration: A Study of Open Source Software Commons." Center for Public Policy and Administration, UMass Amherst. December 5<sup>th</sup>, 2011.
- "Reflections on the creation of an open access GIS coursepack." Panel presentation, Umass Open Access week. University of Massachusetts, Amherst (presented by collaborator <u>Lara Aniskoff</u>). 2011.
- "Successful Internet Collaboration: A Study of Open Source Commons" invited book presentation. 7th International Conference on Open Source Systems. Salvador, Brazil. October 6, 2011.
- "Reflections on Open Source and Government." Panel on open source and e-Government, 7th International Conference on Open Source Systems. Salvador, Brazil. October 6, 2011.
- "Open source and education." In panel of same name. 7th International Conference on Open Source Systems. Salvador, Brazil. October 6, 2011.
- "Toward a Comparison of Open Source Commons Institutions." Presentation at the Convening Cultural Commons conference at the Engelburg Center on Innovation Law & Policy. NYU School of Law. Sept 23-24, 2011.
- "Successful Internet Collaboration: A Study of Open Source Commons." Keynote lecture at the 3<sup>rd</sup> annual Military Open Source Conference (Mil-OSS). Georgia Tech University, August 31, 2011.
- "Success and Abandonment in Internet-based Open Source Software Commons." Invited book talk, College of Business and Public Policy, University of Alaska, Anchorage. June 27<sup>th</sup>. Podcast available at http://greenandgold.uaa.alaska.edu/podcasts/index.php?id=513. 2011
- Mobile Crowdsourcing Activities at UMass Amherst." Invited panel presentation at the Workshop on Citizen Science. Minnowbrook Conference Center, Syracuse University. May 26. 2011.
- "Avatud lähtekoodiga tarkvara projektide õnnestumise ja ebaõnnestumise põhjused OSGeo kaasuse põhjal ("Success and abandonment of open source software projects on the basis of the case of OSGeo"). With M. Kitsing. Invited talk (presented by Kitsing) at the state software workshop of Estonia. Ministry of Economic Affairs and Communications. May 27. Tallinn, Estonia. 2011.
- Schweik, C.M. Reflections on Openness and Innovation. Panelist. Information and Communication Technology Summit, 2011. UMass Amherst.

"Success and Abandonment of Open Source Commons: Implications for Environmental Conservation." Dept of Environmental Conservation Fall 2010 seminar series. November 5<sup>th</sup>. 2010.

- "Success and Abandonment in Open Source Commons: Selected Findings from an Empirical Study of Sourceforge.net Projects." With R. English, Q. Paienjton and S. Haire. Paper presented at the Sixth International Conference on Open Source Systems (OSS 2010) Workshops. Notre Dame, IN, USA. June 2nd 2010. Available at http://works.bepress.com/charles/schweik/17/. 2010.
- "Collaborative Principles in Open Source Commons." Presentation at the Center for Public Policy and Administration, Colloquium Series. UMass Amherst. 3/1/2010.
- "Reflections on Open Source Software for GIS and Spatial Analysis." Invited presentation for a panel organized by Dr. Luc Anselin at the Association of American Geographers conference, Washington, D.C. April 14<sup>th</sup>, 2010.
- "Social, Behavioral and Economic Studies of FOSS: An Organizing Framework." Invited panel presentation at an NSF-sponsored Workshop to defining the research agenda on Free/Libre and Open Source. Institute for Software Research at the University of California at Irvine. (http://foss2010.isr.uci.edu/). Feb 9-12, 2010.
- "The Transformational Effect of Web 2.0 Technologies on Government" (June 1, 2009). With I.A. Mergel and J. E. Fountain. Available at SSRN: http://ssrn.com/abstract=1412796. As of April 2013, this had more than 604 downloads. 2009.
- "Success and Abandonment in Open Source Commons." Presentation at the National Center for Digital Government, UMass Amherst. 2009.
- "Success and Abandonment of Open Source Software Commons: Findings from a 4-year Study." Workshop on the Workshop 4 Conference, Indiana University, Bloomington, IN. 2009.
- "Success and Abandonment in Open Source Software Commons." University of Massachusetts Retired Faculty Association. April 8. 2009.
- "Open Source, Open Source GIS, and the OSGeo Foundation." Presentation at Mount Holyoke College, GIS Day event, November 18th, 2008.
- "The Transformational Effect of Web 2.0 Technologies on Government." With I. Mergel and J.E. Fountain. Paper presented at the Association for Public Policy and Management Conference, Los Angeles, CA. Nov 6-8th. (Paper presented by Ines Mergel), E-Government: Implementation and Organizational Transformation Track. 2008.
- "Open Access and Issues Surrounding It." University of Massachusetts W.E.B Du Bois Library, prior to the First Annual Global Open Access Day webcast event. www.openaccessday.org. October 14, 2008.
- "Factors Leading to Success or Abandonment of Open Source Commons: An Empirical Analysis of Sourceforge.net Projects." With R. English and S. Haire. Paper presented in the Academic Paper

- track of the 2008 Free and Open Source for Geospatial Conference, Cape Town, South Africa. September 29 October 4, 2008.
- "Open Source Software Collaboration: Foundational Concepts and an Empirical Analysis." Minnowbrook III Phase II Conference: The Future of Public Administration, Public Management and Public Service Around the World. Lake Placid NY. Sept 5-7.
- "Three Pressing Information Technology-Related Issues for Public Administration and Management." Minnowbrook III Phase I Conference: The Future of Public Administration, Public Management and Public Service Around the World. Lake Placid NY. Sept 3-5. http://www.maxwell.syr.edu/pa/minnowbrook3/. Critique available at http://www.maxwell.syr.edu/pa/minnowbrook3/ppp/Critiques/Schweik%20Critique.pdf
- Building OSGeo HigherEd Content: Reflecting on an Online Introduction to GIS Course Using QGIS. Free and Open Source Software for Geospatial (FOSS4G) Conference, Victoria, Canada. September 25, 2007.
- "Examining the Structure of Internet-based Open Source Software Collaborations." Paper presented in a panel on IT-enabled Collaboration for Research, Innovation, and Management" at the American Society of Public Administration conference, Washington, D.C. March 25, 2007.
- "Uncovering Design Principles of Open Source Collaborations: Implications for Government Agencies" Paper presented in a panel on Information Technology, Collaboration and Service Delivery, Association for Public Policy and Management Conference, Madison, WI. Nov 3<sup>rd</sup>. (Paper presented by Jane Fountain). 2006.
- "Digital Government and the Environment: Three Areas of Progress." Invited presentation at The First US-China International Workshop on Digital Government Research and Practice (IntDG 2006). This was a workshop between US and Chinese Digital Government researchers as well as representatives of the US NSF and the Chinese NSF. Beijing, China. Oct 11-13<sup>th</sup>, 2006.
- "Towards an "Open Source Commons" in Environmental Management and Policy." Invited presentation at the United Nations University's International Institute of Software Technology. Macau, China. Oct 9<sup>th</sup>. 2006.
- "The Design and Functionality of the Open Research System (Version 3.0)" With <u>A. Semenov</u>. at the Baltimore Ecosystem Study Quarterly Science Meeting on "Sensors, Sensor Networks, and Cyberinfrastructure". University of Maryland, Baltimore Campus. 2006.
- "Public-sector decision-making and the potential of open source and open content collaboration in ecoinformatics". 7th Annual International Conference on Digital Government Research (DG.O 2006). San Diego, CA. May 21-24<sup>th</sup>, 2006.
- "Uncovering the collaborative principles of Free/Libre and Open Source Software." Center for Public Policy and Administration, Umass Amhest. March 3<sup>rd</sup>, 2006.

"Key Issues in Research & Scholarship in the Digital Age at a Research University". Invited presentation at a workshop on "Research and Scholarship in the Digital Age: An Exploration. W.E.B. Du Bois Library, University of Massachusetts Amherst. April 6, 2006.

- "Open Source and Open Content: A Framework for the Development of Land Use Change Models." With T.P. Evans and J.M. Grove. Paper presented at the Integrated Assessment of the Land System: The Future of Land Use workshop. Amsterdam. October 28-30, 2004.
- "Open Source Programming as a Framework for Scientific Collaboration: An Example in the Context of Land-use Change Modeling." With T.P. Evans and J.M. Grove. Paper presented at the (invited only) Workshop on Scholarly Communication as an Information Commons. Workshop in Political Theory and Policy Analysis, Indiana University. March 31-April 2. Available at: http://dlc.dlib.indiana.edu/archive/00001247/. 2004.
- "An Open Content Framework for the Production of Landcover Change Models." With T.P. Evans and J.M. Grove. Presentation at the 2003 Open Meeting of the Human Dimensions of Global Environmental Change Research Community, Montreal, CA. October 16, 2003.
- "The Open Research System: A Web-Based Metadata and Data Repository for Collaborative Research." With <u>A. Stepanov</u> and J.M. Grove. Presented at the Information Interoperability and Organization for National and Global Forest Information Systems. Quebec City, Quebec, CA. Sept 17. 2003.
- "An Open Research System For Collaboration and Synthesis in Long Term Ecological Research." With J. M. Grove and J. Walsh. Presented at the NSF Long Term Ecological Research All Scientists meeting in a workshop entitled "Information Technology for the Decade of Synthesis: LTER Partners and Projects Leveraging Resources and Metadata to Meet a Common Goal" in Seattle, WA on 9/22/03. Presentation made by Walsh. 2003.
- "An Open Source Framework for Landuse Modeling: Kernels and Constituents." With J.M. Grove (presenter), T.P. Evans, and G. Pontius. Presentation at European-American Workshop on Long Term Socio-Environmental Research in Lyons, France, June 29th July 6th, 2003.
- "The Open Source Paradigm and the Production of Scientific Research." With J.M. Grove and T.P. Evans. Presentation at the International Symposium on Open Access and Public Domain in Digital Data and Information for Science, United Nations Educational, Scientific and Cultural Organization (UNESCO), Paris France. March 11, 2003.
- "Connecting Landcover Change Models to Policy Needs by Spatial Scale." With T.P. Evans (presenter) and J.M. Grove. At the "Framing Land Use Dynamics: Integrating knowledge on spatial dynamics in socio-economic and environmental systems for spatial planning in western urbanized countries" International Conference 16-18 April. Utrecht University, The Netherlands. 2003.
- "The Institutional Design of "Open Source" Programming: Implications for Addressing Complex Problems in Pubic Policy and Management. Twenty-Fourth Annual APPAM Research Conference, Dallas TX. November 7-9, 2002.

"Exploring the E-Government Frontier." Invited speaker at the New England Government Finance Officers' Association Meeting, Burlington, VT. September 14<sup>th</sup>. 2001.

- "Using Remote Sensing to Evaluate Habitat Conservation Plans: The Case of the Coachella Valley Fringe-Toed Lizard," (with C. Thomas). Western Political Science Association Annual Meeting, Las Vegas, March 15-17, 2001.
- "Review and Assessment of Land Use Change Models: Dynamics of Space, Time and Human Choice." With C. Agarwal, G.L. Green, J. M. Grove and T. P. Evans. 4th International Conference on Integrating GIS and Environmental Modeling (GIS/EM4): Problems, Prospects and Research Needs. Banff, Alberta, Canada, September 2 8, 2000.
- "Using Remote Sensing to Evaluate Environmental Regulations." With C. W. Thomas (presenter). Annual Meeting of the American Political Science Association, Washington, D. C., August 31-September 3, 2000. (Paper presented by Thomas).
- "Fostering Open-Source Research Via a Web System." With J. M. Grove. Paper Presented at the Association for Computers and the Social Sciences Annual Online Conference, April 15-May 15. http://www2.chass.ncsu.edu/css2000/, also presented (by Grove) at the 4th International Conference on Integrating GIS and Environmental Modeling (GIS/EM4): Problems, Prospects and Research Needs. Banff, Alberta, Canada.September 2 8, 2000.
- "Global Monitoring: An Introduction." Invited presentation at the Human Dimensions of Global Change Workshop, Schloss Wendgraben, Germany. Sponsored by the German National Committee on Global Change Research and the International Human Dimensions of Global Change Program. 2000.
- "A Multi-Method Framework for Evaluating Habitat Conservation Plans Using Remote Sensing Analysis." With C. Thomas. International Association for the Study of Common Property Conference, May 31- June 3. Bloomington, Indiana.
- "Regulatory Compliance Under the Endangered Species Act: A Time Series Analysis of Habitat Conservation Planning Using Remote Sensing Data." With C. Thomas. Annual Meeting of the Association for Public Policy Analysis and Management (APPAM), Washington D.C., Nov 1999.
- "The Promise of Spectral Mixture Analysis for Forest Policy and Management." Annual Meeting of the Association of Public Policy Analysis and Management, New York, NY. October 29-31, 1999.
- Chair, Comparative Environmental Policy Panel. Annual Meeting of the Association of Public Policy Analysis and Management, New York, NY. October 29-31, 1998.
- "Linking Satellite Images to Land Use Activities: An Exploratory Study of Southern Indiana Non-Industrial Private Forests," With T. Koontz and L. Carlson. Western Political Science Association Meeting, Fort Collins, Colorado. (Paper presented by T. Koontz)
- "Using Spatial Information to Understand Forest Change and Community Dynamics: A Case From Nepal," 26th Annual Conference on South Asia, Center for South Asia, University of Wisconsin at Madison, October 16-20, 1997.

"The Spatial Analysis of Natural Resources in East Chitwan, Nepal: Conceptual Issues and a Multi-Scale Research Program." 1996. Paper Presented at the Conference on Participation, People, and Sustainable Development: Understanding the Dynamics of Natural Resource Systems, Institute of Agriculture and Animal Sciences (IAAS), Central Campus, Rampur, Chitwan, Nepal, March 17-20. 1996.

- Discussant, Data Collection Methods and Tools panel at the National Seminar on Improving Support Services to Farmer-Managed Irrigation Systems (FMIS), Kathmandu, Nepal, September 1-2, 1994.
- "A Relational Archive for Natural Resources Governance and Management," Application of Advanced Information Technologies: Effective Management of Natural Resources, At the Conference of the American Society of Agricultural Engineers, Spokane, Washington, June 8-19, 1993.

#### **TEACHING**

### **University Teaching and Evaluations:**

Department of Environmental Conservation (ECo), Center for Public Policy and Administration (PPA), School of Public Policy (SPP) at the University of Massachusetts, Amherst.

Mean ratings are based on the mean of three "global" questions asked of the students in the class: (1) What is the overall rating of this instructor's teaching; (2) Overall, how much do you feel you have learned in this course; and (3) What is your overall rating of this course. A 5-point-scale is used where 1 = One of the worst.....5 = One of the best; Departmental criteria:  $\ge 3.9 = \text{excellence}$ , 3.1-3.89 = strength, <3.1 = fails to meet basic expectations. Of course, these questions do not capture adequately the quality of a teacher, but is one metric used on my campus and in my department.

Course	Credits/ Semester/Yr	Title	# of students	Mean rating
SPP597GC	3/Fall 2020	Governing the Commons (1st time offering)	13	4.4
SPP597M	1/Fall 2020	Makerspace (pandemic, online)	12	4.1
Honors391AI		Workshop in Commons-based PP. (pandemic, or	ıline) 15	4.0
SPP597M	1/Spring 2019	Makerspace	24	4.5
NRC597B	3/Spring 2019	Unmanned Aerial Systems (w/ Ryan Wicks)	18	4.4
NRC309	3/Spring 2019	Natural Resource Policy and Admin	94	4.13
SPP597M	1/Fall 2019	Makerspace	17	4.7
Honors391AI	H 1/Fall 2019	Workshop in Commons-based Peer Production	12	3.9
EnvSci 213	3/Fall 2019	Environmental Policy	99	4.3
SPP597M	1/Spring 2019	Makerspace	11	4.3
NRC597B	3/Spring 2019	Unmanned Aerial Systems (w/ Ryan Wicks)	17	4.23
NRC409	3/Spring 2019	Natural Resource Policy and Admin	100	3.93
SPP597M	1/Fall 2018	Makerspace	14	4.4
Honors391AI	H 1/Fall 2018	Workshop in Commons-based Peer Production	14	4.23
SPP597T	3/Fall 2018	Information Technology for Public and Nonprofi	t 7	3.73
PPA597M	1/Spring 2018	Makerspace	16	4.5
PPA597B	3/Spring 2018	Unmanned Aerial Systems	18	4.0
NRC409	3/Spring 2018	Natural Resource Policy and Administration	100	4.3
Honors391AI	H 1/Fall 2017	Workshop in Commons-based Peer Production	11	3.6
PPA597M	1/Fall 2017	Makerspace	16	4.5
NRC409	3/Fall 2017	Natural Resource Policy and Admin	42	4.43
PPA597M	1/Spring 2017	Makerspace	4	4.3
PPA597B	3/Spring 2017	Unmanned Aerial Systems (w/ Ryan Wicks)	11	4.7
NRC409	3/Spring 2017	Natural Resource Policy and Admin	98	4.10
PPA607	3/Fall 2016	Policy Methods	23	
Honors391AI	H 1/Fall 2016	Workshop in Commons-based Peer Production	15	4.37
NRC597WG	3/Spring 2016	Community Service with Web GIS	23	4.17
NRC409	3/Spring 2016	Natural Resource Policy and Admin	82	4.2
NRC585	3/Fall 2015	Introduction to Geographic Information Systems	61	4.6
NRC497MS	3/Fall 2015	Makerspace	16	4.1
Honors391AI		Workshop in Knowledge Commons	14	4.1
PPA697	4/Fall 2014	Introduction to Geographic Info Systems	11	4.8
NRC585	4/Fall 2014	Introduction to Geographic Info Systems	47	4.37

Honors391A	1/Fall 2014	Workshop in Knowledge Commons	8	4.5
NRC497MS	3/Fall 2014	Makerspace	12	4.17
PPA610	3/Sp 2014	Public Policy and Admin Capstone	6	4.8
NRC409	3/Sp 2014	Natural Resource Policy and Admin	83	4.1
PPA697	4/Fall 2013	Introduction to Geographic Info Systems	9	4.85
NRC585	4/Fall 2013	Introduction to Geographic Info Systems	51	4.8
PPA397B	3/Summer 2013	Introduction to Geographic Info Systems	10	4.38
NRC409	3/Sp 2013	Natural Resource Policy and Admin	82	4.13
PPA631	3/Sp 2013	Information Technology for Public\Nonprofit	11	4.43
NRC697I	3/Sp 2013	Information Technology for Public\Nonprofit	6	4.76
PPA697	4/Fall 2012	Introduction to Geographic Info Systems	2	4.4
NRC585	4/Fall 2012	Introduction to Geographic Info Systems	38	4.56
NRC409	3/Sp 2012	Natural Resource Policy and Admin	81	4.03
PPA631	3/Sp 2012	Information Technology for Public\Nonprofit	18	4.03
PPA697	3/Fall 2011	Introduction to Geographic Info Systems	4	4.22
NRC592G	3/Fall 2011	Introduction to Geographic Info Systems	25	4.43
PPA631	3/Sp 2011	Information Technology for Public\Nonprofit	12	4.37
NRC697I	3/Sp 2011	Information Technology for Public\Nonprofit	7	4.46
NRC297S	3/Sp 2011	Spatial Technologies	55	4.46
PPA697	3/Fall 2010	Introduction to Geographic Info Systems	7	4.76
NRC592G	3/Fall 2010	Introduction to Geographic Info Systems	20	4.76
NRC277S	3/Sp 2010	Spatial Technologies	56	4.4
PPA631	3/Sp 2010	Information Technology for Public\Nonprofit	10	4.73
NRC697I	3/Sp 2010	Information Technology for Public\Nonprofit	3	5.0
PPA697	3/Fall 2009	Introduction to Geographic Info Systems	6	4.4
NRC592G	3/Fall 2009	Introduction to Geographic Info Systems	20	4.56
PPA631	3/Sp 2007	Information Technology for Public\Nonprofit	14	4.33
NRC697I	3/Sp 2007	Information Technology for Public\Nonprofit	6	4.44
PPA697	3/Fall 2006	Introduction to Geographic Info Systems	7	4.3
NRC592G	3/Fall 2006	Introduction to Geographic Info Systems	21	4.55
NRC697I	3/Sp 2006	Spatial Technologies	55	3.99
PPA631	3/Sp 2006	Information Technology for Public\Nonprofit	14	4.09
NRC697I	3/Sp 2006	Information Technology for Public\Nonprofit	7	4.88

# **Teaching Awards**

Named one of the *Top 50 Innovators in Education* in the nation by the Center for Digital Education in their publication *Converge*. <a href="http://images.erepublic.com/documents/CDE12+YB+Draft.pdf">http://images.erepublic.com/documents/CDE12+YB+Draft.pdf</a>. 2012.

e.Republic, Inc., the publisher of Converge (and other trade journals like *Governing*, *Government Technology*, *Public CIO* as well as *Converge*), touts itself as "the nation's leading publishing, research, event and new media company focused on the state and local government and education markets."

Nominated for the University of Massachusetts Distinguished Teaching Award (the most prestigious teaching award at UMass): (2018, 2013, made it to final round). 2018, 2013, 2008, 2003.

Honorable mention. Maxwell School E\_PARCC Collaborative Governance Initiative competition for teaching case "The Adoption of Technology Open Standards Policy by the Commonwealth of Massachusetts" (co-written with Lucia Miller).

www.maxwell.syr.edu/parcc/eparcc/Sixth\_Annual\_Competition\_Winners/

Case available at:

http://www.maxwell.syr.edu/parcc/eparcc/cases/Adoption\_of\_Technology\_Open\_Standards\_Policy\_by\_the\_Commonwealth\_of\_Massachusetts/. \$500 prize. 2013.

Associate Instructor Teaching Award, School of Public and Environmental Affairs, Indiana University. 1998.

### SELECTED KEY SERVICE ACTIVITIES

#### **Selected Professional Service:**

- President, International Association for the Study of the Commons. 2023-present.
- President elect, International Association for the Study of the Commons. 2020.
- Editorial boards:
  - International Journal of the Commons
  - World Development Sustainability
- I've been a reviewer for at least 17 different journals as well as books and tenure cases (not listed).
- Regular invitee to participate in US National Science Foundation proposal review panels: 2006, 2007, 2008, 2009, 2012, 2013 and 2014.
- Founder and lead organizer, World Commons Week (2018, 2019, 2020). See <a href="https://wcw2020.iasc-commons.org/">https://wcw2020.iasc-commons.org/</a>.
- Chair, Elinor Ostrom Award. Elinor Ostrom Award.org. 2017-19.
- Chair of the Open Source Geospatial Foundation's Education Committee (OSGeo.org). 2007 2016.
- Co-Founder, international GeoForAll.org; (<a href="https://www.osgeo.org/initiatives/geo-for-all/">https://www.osgeo.org/initiatives/geo-for-all/</a>) (with Suchith Anand, U of Nottingham, UK; Helena Mitsaova, NCSU, USA)
- Co-Founder, international Workshop on Governance of Knowledge Commons
   (<a href="http://knowledge-commons.net">http://knowledge-commons.net</a>) (with Brett Frischman, Cardozo School of Law; Katherine
   Strandburg, New York School of Law; Michael Madison, Pittsburg School of Law; Tom
   Dedeurwaerdere, Université catholique de Louvain, Louvain-la-Neuve, Belgium; and Charlotte
   Hess, Syracuse University). <a href="http://Knowledge-commons.net">http://Knowledge-commons.net</a>.
- Awarded an NSF grant and coordinated two Doctoral Consortia co-located at the International Conference on Open Source Systems. Savladore, Brazil (OSS 2011) and Hammamet, Tunisa (OSS 2012).

## **Selected UMass Service**

- Faculty adviser, UMass All-Campus Makerspace (2018-2019)
- Interim Director, School of Public Policy, 2016-2017.
- Member or chair, Dept of Environmental Conservation Personnel Committee (Various years)

- Member or chair, School of Public Policy Personnel Committee (Various years)
- Member or chair, faculty search committees Dept of Environmental Conservation (Various years)
- Member or chair, faculty search committees School of Public Policy (Various years)
- Active and regular service with the UMass Amherst Libraries. I have been a regular member of the Faculty Senate Research Library Council since 2007 and have chaired that committee since 2016.
- Founding Member, UMass Information Technology Program (<a href="www.umass.edu/itprogram">www.umass.edu/itprogram</a>)
- Associate Director, UMass National Center for Digital Government. 2006-2019.