

# Ryan L. Burns

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## Academic Employment

- 2016-present    Assistant Professor  
                    Department of Geography, University of Calgary
- 2015-2016      Assistant Professor of Instruction  
                    Department of Geography and Urban Studies, Temple University

## Education

- 2009-2015      Ph.D., Geography  
                    University of Washington  
                    Committee: Sarah Elwood, Mark Ellis, Vicky Lawson, Jin-Kyu Jung (Interdisciplinary Arts & Sciences, UW-Bothell)  
                    Dissertation title: *Digital Humanitarianism and the Geospatial Web: Emerging Modes of Mapping and the Transformation of Humanitarian Practices*
- 2010-2015      Work toward Certificate in Public Scholarship, Simpson Center for the Humanities, UW
- 2009             M.S., Geographic Information Science  
                    San Diego State University  
                    Committee: André Skupin, Stuart Aitken, Eniko Csomay (Linguistics)  
                    Thesis title: *Spatializing Places, People, and Utterances – A Case Study Involving San Diego Neighborhoods*
- 2006             B.A., Geography, Magna Cum Laude  
                    Eastern Kentucky University

## Affiliations

- HASTAC Scholar, *Humanities, Arts, Science, and Technology Alliance and Collaboratory (HASTAC)*
- Member, *Standby Task Force (digital humanitarian organization)*
- Member, *Gamma Theta Upsilon (international geographic honorary society)*
- Member, *International Association of Emergency Managers*
- Member, *Association of American Geographers (AAG)*

## Grants, Fellowships, and Awards

2016-2019	\$150,000. University of Calgary, Human Dynamics Research Strategy. “The Social and Environmental Implications of Smart Cities: A Global Comparative Research Agenda”. PI: Byron Miller Co-PIs: Gwendolyn Blue, <b>Ryan Burns</b> , Dean Curran, Victoria Fast, Noel Keough, Jack Lucas, Greg Morrow, Elizabeth Paris, Matt Patterson, Marit Rosol, Alan Smart, Josephine Smart, Eliot Tretter, Kathryn Reese-Taylor, Melanie Rock, Frank Towers, Aaron Williams
2016	\$1,500. University of Calgary, Vice President of Research Faculty Conference Travel Grant
2013	\$4,000. United Nations Office for the Coordination of Humanitarian Affairs: “Humanitarian Research and Innovation Grant”
2013	\$3,000. UW Graduate School Gerlach Award
2011-2012	\$1,000. Simpson Center for the Humanities Graduate Interest Group Funding
2011	\$750. Simpson Center for the Humanities Travel Funds
2011	\$556. Howard Martin Research Grant
2011	\$500. UW Graduate School Fund for Excellence and Innovation
2011	\$250. UW Graduate & Professional Student Senate Travel Fund
2009	\$1,800. International Cartographic Association (ICA) Travel Scholarship
2009	\$9,000. UW Geography Top Scholar Award
2009	\$500. Cartography & Geographic Information Society (CaGIS) Master’s Award
2007	\$6,600. SDSU McFarland Award
2007	\$50. SDSU Map Design Competition winner
2005	\$5,000. School for International Training – “Culture, Language, and Development in Vietnam” research scholarship

## Research Activities

2016 (invited)	Ethics of Location-Based Technologies in Crisis Workshop. American Association for the Advancement of Science. Washington, DC. Invited as participant.
2016	Summer Institute in Economic Geography. University of Kentucky, Lexington. Selected as participant.
2015	Fellow, Data Science for Social Good Fellowship. eScience Institute, University of Washington. <a href="http://escience.washington.edu/what-we-do/data-science-for-social-good">http://escience.washington.edu/what-we-do/data-science-for-social-good</a>
2014	"Revisiting Critical GIS". Friday Harbor Laboratories, Friday Harbor, WA. Selected as participant.
2013	Oxford Internet Institute Summer Doctoral Programme. i-School, University of Toronto, Canada
2011	Bergen Summer Research School. University of Bergen, Norway

## Publications

### *Peer Reviewed Articles and Book Chapters*

- In press      Burns, Ryan. Synergizing Geoweb and Digital Humanitarian Research. In Thatcher, J., A. Shears, J. Eckert (eds.), *The Geoweb and Geography: (Re)Thinking Research in the Advent of Big Data*. Lincoln, NE: University of Nebraska Press.
- 2016      Thatcher, Jim, L. Bergmann, B. Ricker, R. Rose-Redwood, D. O'Sullivan, T. Barnes, L. Barnesmoore, L. Beltz Imaoka, R. Burns, J. Cinnamon, C. Dalton, C. Davis, S. Dunn, F. Harvey, J.-K. Jung, E. Kersten, L. Knigge, N. Lally, W. Lin, D. Mahmoudi, M. Martin, W. Payne, A. Sheikh, T. Shelton, E. Sheppard, C. Strother, A. Tarr, M. Wilson, J. Young. "Revisiting Critical GIS: Reflections from Friday Harbor". *Environment & Planning A* 48(5): 815-824.
- 2015      Burns, Ryan, D. Meek. Introduction: The Politics of Knowledge Production in the Geoweb. *ACME: An International E-Journal for Critical Geographies* 14(3): 786-790.
- 2015      Schwartz, B., B. Tellman, R. Burns, C. Andersson. Big Data, Satellites, and Disaster Monitoring. In *UN Human Development Report 2015*. Incorporated into *Global Sustainable Development Report*:  
<https://sustainabledevelopment.un.org/content/documents/1758GSDR%202015%20Advance%20Unedited%20Version.pdf> (last accessed 6/16/2015).
- 2014      Burns, Ryan, J. Thatcher. Guest Editorial: What's So Big about Big Data? Finding the Spaces and Perils of Big Data. *GeoJournal*. <http://link.springer.com/article/10.1007/s10708-014-9600-8> (last accessed 10/21/2014).
- 2014      Burns, Ryan. Rethinking Big Data in Digital Humanitarianism: Practices, Epistemologies, and Social Relations. *GeoJournal* 80(4):477-490. <http://link.springer.com/article/10.1007/s10708-014-9599-x> (last accessed 10/15/2014).
- 2014      Burns, Ryan. Moments of Closure in the Knowledge Politics of Digital Humanitarianism. *Geoforum* 53 (2): 51-62.
- 2013      Shanley, Lea, R. Burns, Z. Bastian, E. Robson. Tweeting Up a Storm: The Promise and Perils of Crisis Mapping. *Photogrammetric Engineering & Remote Sensing* 79 (10): 865-879.
- 2013      Burns, Ryan, A. Skupin. Towards Qualitative Geovisual Analytics: A Case Study Involving Places, People, and Mediated Experience. *Cartographica* 48(3): 157-176.

### *Edited Journal Issues (with Peer Review)*

- In review      Burns, Ryan, N. Lally. "Toward a Geographical Software Studies." Special Issue of *Computational Culture*.
- Accepted      Burns, Ryan, C. Dalton, J. Thatcher. "Making More out of Data: Advancing Critical Data Studies." Special Issue of *Professional Geographer*.
- 2015      Burns, Ryan, D. Meek. "The Politics of Knowledge Production in the Geoweb." Special Issue of *ACME: An International E-Journal for Critical Geographies*.

- 2014 Burns, Ryan, J. Thatcher. "What's So Big about Big Data? Finding the Spaces and Perils of Big Data." Special Issue of *GeoJournal*.

#### *Conference Proceedings and White Papers*

- 2013 Burns, Ryan, L. Shanley. Connecting Grassroots to Government for Disaster Management: Workshop Summary. Woodrow Wilson International Center for Scholars. <http://www.scribd.com/doc/165813847/Connecting-Grassroots-to-Government-for-Disaster-Management-Workshop-Summary> (last accessed 3/7/2014).
- 2012 Burns, Ryan. Connecting Grassroots to Government for Disaster Management. Woodrow Wilson International Center for Scholars. <http://bit.ly/OC4kmD> (last accessed 9/18/2012).
- 2009 Burns, Ryan, A. Skupin. Mapping Places, People, and Utterances to Visualize the Experience of Place. In Proceedings of the 24th International Cartographic Conference, Santiago, Chile (CD-ROM). <http://bit.ly/POhGuu> (last accessed 9/12/2012).

#### *Published Maps*

- 2011 [Collection of 3 maps] In Ramamurthy, P., "Rearticulating Caste: The Global Cottonseed Commodity Chain and the Paradox of Smallholder Capitalism in South India," *Environment and Planning A* 43: 1035-1056.
- 2011 [Collection of 5 maps/screenshots from the *Mapping Youth Journeys* project website] In K. Mitchell, S. Elwood, "Creating Engaged Students and Civic Actors through Mapping Local History," *Journal of Geography* 111(4): 148-157.
- 2010 [Collection of 6 maps about poverty in the Pacific Northwest] In V. Lawson, L. Jarosz and A. Bonds, "Dumping Grounds and Unseen Grounds: Placing Race, Ethnicity and Poverty in the American Northwest," *Annals of the Association of American Geographers* 100(3): 655-677.
- 2007 Map of Ecuador, Including the Extension of Páramo Grasslands and the Location of the Agglomerados, S.A. (ACOSA) Plantation. In K. Farley, "Grasslands to Tree Plantations: Forest Transition in the Andes of Ecuador," *Annals of the Association of American Geographers* 97(4): 760.

## **Conference Presentations**

#### *Papers presented*

- 2016 (invited) "Big Data, digital humanitarianism, and smart cities: New directions for GIScience research". **Invited presentation** at San Diego State University Department of Geography: San Diego, CA.
- 2016 (accepted) "Smart cities, open data, and knowledge politics: Blank spots in cartographic representations". NACIS 2016: Colorado Springs, CO. Withdrew due to scheduling conflicts.

- 2016 (accepted) "The inequalities of economic and representational inclusion in digital 'solutions' to urban crisis". Regional Studies Association: Smart City-Regional Governance for Sustainability. Dresden, Germany.
- 2016 "Everyday disruptions, digital restorations: Community engagement and resistance to digital humanitarianism". Annual Meeting of the AAG: San Francisco, CA.
- 2015 "'Let the private sector take care of this': Toward a Political Economy of Digital Humanitarianism". Annual meeting of the AAG. Chicago, IL.
- 2014 "Crisis Mapping as Social Process: Research and Policy Implications of New Digital Technologies". **Invited keynote presentation** at Crisis Mapping Seminar, Heidelberg University, Germany.
- 2014 "The Digital Humanitarian Moment: New Practices, Knowledge Politics, and Philanthro-capitalism." University of Washington Department of Geography Colloquium. Seattle, WA.
- 2014 "Rethinking Knowledge Politics through Digital Humanitarianism." Annual meeting of the AAG. Tampa, FL.
- 2012 "Digital Public Scholarship: Mapping Youth Journeys." College of Arts & Sciences Dean's Showcase. *HuskyFest 2012*. Seattle, WA.
- 2012 "Beyond Inclusion and Empowerment: Inequality in the Geoweb." Annual meeting of the AAG. New York, NY.
- 2011 "Software-sorted Geographies of the Urban Global South." Annual meeting of the AAG. Seattle WA.
- 2010 Mitchell, K. & R. Burns [equal contribution] "Mapping Engagement: Using Basic Geovisualization Technologies to Help Children Become Better Geographers and Better Citizens." **Plenary session**, Fall meeting of the Association of Washington Geographers.
- 2010 "'Exploring Geovisualization': Reflections, Ideas, and Questions." Annual meeting of the AAG. Washington, D.C.
- 2009 "Visualization of Attribute Spaces Involving Places, People and Utterances." International Cartographic Conference. Santiago, Chile.
- 2009 "Spatializing Places, People, and Utterances- A Case Study Involving San Diego Neighborhoods." Annual meeting of the AAG. Las Vegas, NV.
- 2008 "Landscapes of Participatory Dialogue: Participation and Geovisualization in AgoraXchange." Annual Meeting of the AAG. Boston, MA.
- 2008 Verutes, G., R. Burns "Visualizing Linguistic Variation within University Classroom Discourse." Annual Meeting of the AAG. Boston, MA.
- 2007 "...things seen are temporal, things unseen are eternal.." Association of Pacific Coast Geographers. Long Beach, CA. Co-presenters: Christopher Moreno, Sean Crotty, Steven Jareb, Mike Beland, Jenny Duncan, Karen Stahl.
- 2006 "Globalization and the Cultural Significance of Bookstores in Viet Nam." Undergraduate Presentation Showcase, Eastern Kentucky University. Poster presentation.

- 2005 “Is Small-town Kentucky Ready to Grow? Community Readiness for Growth and Development Along the I-75 Corridor.” Posters-at-the-Capitol, Frankfort, KY. Poster presentation. Co-presented with Ricardo Hernandez.

*Panel Participation & Sessions Organized*

- 2016 Organizer. “Hipster Geographies: Socio-spatial Practices, Politics, and Economies of Culture’s Most Maligned Figure”. Annual Meeting of the AAG. San Francisco, CA. Organizer with Cristina Temenos and Jesse McClelland. (2 sessions)
- 2016 Organizer. “Toward a Geographical Software Studies”. Annual meeting of the AAG. San Francisco, CA. Organizer with Nick Lally. (4 sessions)
- 2015 Consultant. “Academic Partnerships with HOT”. Humanitarian OpenStreetMap Team Summit. Organizer: Robert Soden.
- 2015 Organizer. “Critical Data, Critical Technology: in Theory.” Annual meeting of the AAG. Chicago, IL. Organizer with Jim Thatcher and Craig Dalton. 2 sessions.
- 2015 Organizer. “Critical Data, Critical Technology: in Praxis.” Annual meeting of the AAG. Chicago, IL. Organizer with Jim Thatcher and Craig Dalton.
- 2015 Organizer. “On the Political Economy of Geospatial Technologies.” Annual meeting of the AAG. Chicago, IL. Organizer with Jim Thatcher and Craig Dalton.
- 2014 Panelist. “Publishing, not Perishing: A Student's Guide to Academic Publishing.” Annual meeting of the AAG. Tampa, FL.
- 2014 Panelist. “alt.conference on Big Data: Lightning Panel.” Annual meeting of the AAG. Tampa, FL.
- 2013 Organizer. “Whither Small Data?: The Limits of ‘Big Data’ and the Value of ‘Small Data’ Studies.” Organizer with Jim Thatcher. Annual meeting of the AAG. Los Angeles, CA. Presenting panelists: Rob Kitchin, Jim Thatcher, Ralph Schroeder (Oxford Internet Institute, Oxford University), Taylor Shelton. Discussant: Andrés Monroy-Hernández (Microsoft Research).
- 2013 Organizer. “Critical Interventions into Gender & the Geoweb.” Organizer with Monica Stephens. Annual meeting of the AAG. Los Angeles, CA. Presenting panelists: Brent Hecht, Monica Stephens, Michele Masucci, Adrienne Wadewitz (Center of Digital Learning and Research, Occidental College).
- 2012 Organizer. “Connecting Grassroots to Government for Disaster Management: A Policy Roundtable.” Organizer with Lea Shanley, John Crowley, and Alyson Lyons. Washington, DC. For list of panelists, see:  
[http://www.wilsoncenter.org/sites/default/files/GrassrootstoGovernmentAgenda-9.9.12\\_0.pdf](http://www.wilsoncenter.org/sites/default/files/GrassrootstoGovernmentAgenda-9.9.12_0.pdf)
- 2011-2012 Organizer. Series of 6 panels and roundtables on “Making the University Public”, a Graduate Interest Group through the Simpson Center for the Humanities, UW. Seattle, WA. Panels included: Susan Jeffords (Vice Chancellor for Academic Affairs, UW – Bothell), Kari Lerum

(UW – Bothell), Tad Hirsch (Design, UW), Jentery Sayers (English, University of Victoria), John Vallier (UW Libraries), Richa Nagar (Department of Gender, Women, and Sexuality Studies, University of Minnesota).

- 2011 Organizer. “Critical Perspectives on Software & Space.” Organizer with Joe Eckert. Annual meeting of the AAG. Seattle, WA. Presenting panelists: Mark Graham, Matt Zook, Rob Kitchin, Wendy Chun (Modern Culture and Media, Brown University). Chair: Sarah Elwood. Discussant: Matt Wilson.

#### *Discussant*

- 2014 “Disaster Time: Critical Perspectives on Crisis Informatics and the Temporal Aspects of Disasters.” Annual meeting of the AAG. Tampa, FL. Organized by Barbara Poore and Sophia Liu. Presenters: Katrina Petersen (Communication, University of California – San Diego), Megan Finn (Microsoft Research, University of Washington), Sophia Liu (USGS).
- 2013 “Critical Interventions into Gender & the Geoweb.” Annual meeting of the AAG. Los Angeles, CA. Presenting panelists: Brent Hecht, Monica Stephens, Michele Masucci, Adrienne Wadewitz (Center of Digital Learning and Research, Occidental College).
- 2013 “Crowdsourcing Crisis in the GeoWeb: A Critical Look.” Annual meeting of the AAG. Los Angeles, CA. Organized by Barbara Poore and Sophia Liu. Presenters: Katrina Petersen (Communication, University of California – San Diego), Andrés Monroy-Hernández (Microsoft Research), Megan Finn (Microsoft Research), Cameran Ashraf (University of California – Los Angeles).

### **Additional Research Activities**

- 2014 Research Assistant: Dr. Matt Dunbar, Center for Studies of Demography and Ecology
- 2009-2012 Research Assistant: Dr. Sarah Elwood, *Mapping Youth Journeys*
- 2009-2010 Assistant: Dr. Katharyne Mitchell, *Top This Parenting*
- 2008-2009 GIS Specialist: Helix Environmental Planning, Inc.
- 2007 GIS Analyst/Cartographer: Baja Directions (bathymetric cartography company)
- 2006-2007 SDSU Geography Graduate Assistant: Dr. Kathleen Farley
- 2006-2007 GIS Analyst: IGIS Technologies, Inc. (GIS services consulting company)
- 2005 Volunteer Assistant: Dr. Dan Weir, mapping a derelict cemetery for future renovation and restoration. My particular involvement was to map the gathered GPS coordinates.
- 2003-2006 Assistant: Dr. David Zurick, researching culture change in the Himalayas based on US-based travel agencies there.
- 2003-2006 Assistant: Dr. Bruce Davis, producing an online atlas of the South Pacific using ArcScan and ArcIMS.

## Teaching

### *Temple University*

2016	Web and Mobile GIS (2 sections)
2015-2016	Digital Mapping (2 sections)
2015-2016	Fundamentals of GIS (3 sections)

### *University of Washington*

2015	GIS Databases and Programming
2014	Cultural Geography
2013	The Making of World Regions (Online course)
2012	Urban GIS

### *Invited Lectures*

2016 (invited)	Guest lecture in GEOG 340: Qualitative Methods in Human-Environment Research (UofC)
2016 (invited)	Guest lecture in GEOG 463: Cities, Poverty, and Development (UofC)
2016	Guest lecture in ENST 2097: Research Design in Environmental Studies (TU)
2015	Seminar host in Data Science for Social Good program (UW)
2014	Guest lecture in GEOG 360: Introduction to GIS (UW)
2014	Guest lecture in GEOG 277: Geographies of Cities (UW)
2012	Guest lecture in GEOG 469/569: GIS Workshop (UW)
2012	Guest lecture in GEOG 461/561: Urban GIS (UW)
2010	“Participatory Mapping” Imagining America Site Visit (UW)

### *Teaching Assistant*

2014	UW Geography Teaching Assistant: <i>Introduction to GIS</i>
2012	UW Geography Teaching Assistant: <i>Urban GIS, GIS Workshop</i>
2007-2008	SDSU Geography Teaching Assistant: <i>Introduction to GIS</i> (twice), <i>Map Investigation</i> , and <i>Animated Cartographic Design</i>

## Student supervision

2016	Jessica Waldinger, Spring 2016 CARAS Project Grant
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2015-2016      Jing-Huei Huang, Community service GIS project. “The Practice Use of Geographic Information System (GIS): East Falls Village – Identify Existing and Target Members”

## **Professional Service**

2015-2016      Professional Science Master’s in GIS Steering Committee

2013-2014      Secretary and Treasurer, *Geographic Information Systems & Science Specialty Group of the AAG*

2012-2013      Leadership Collective Member, *Socialist & Critical Geography Specialty Group of the AAG*

2012-2013      Research Assistant, *Commons Lab, Woodrow Wilson International Center for Scholars*

2008-2012      Webmaster, Socialist & Critical Geography Specialty Group of the AAG

2011-2012      Primary Project Liaison, “Making the University Public” Graduate Interest Group

2011-2012      Graduate Policy Committee Representative, Department of Geography, UW

2010-2011      Co-president (with Chris Lizotte) of the Geography Dept Graduate Student Association

2007-2008      SDSU Geography Colloquium Planning Committee

2002-2006      ECU Honors Program scholar

2002-2004      ECU Geography Club President once and Secretary twice

## **Manuscript Reviews**

*Philosophical Transactions*

*New Media & Society*

*GeoJournal* (x2)

*Cartographica*

*Geography Compass* (x3)

*Plenum: A Journal of Geography* (x2)

*International Journal of Applied Geospatial Research*

*US National Report to the International Cartographic Association*

## **Community and Public Scholarship**

2015              Formatting and Sharing Your Syllabus with Markdown and Github. Invited workshop at Temple University, 10/30/2015.

2014              Impact Evaluation Framework public portfolio, in partial fulfillment of graduate certificate in public scholarship.

2013              Interview for the Digital Humanitarian Network, “Guidance for Collaborating with Formal Humanitarian Organizations.” <http://app.box.com/s/w25sqotkg4qc2f2ch1ii>.

2012-2013      Participation in various digital humanitarian activations (Samoa, Dominican Republic, Typhoon Bopha)

- 2012 Interview for *Simpson Center for the Humanities News*, “Doctoral Student Ryan Burns Selected to Present on Digital Scholarship at UW HuskyFest 2012.” <http://bit.ly/HUCIQS>.
- 2012 Interview for *UW Today*, “UW Leads in Connecting Scholarship with Community.” <http://bit.ly/yQ77sX>.
- 2011 Attended Imagining America public scholarship conference. Coverage in “Certificate in Public Scholarship Fellows Represent UW at Imagining America Conference.” *Simpson Center for the Humanities Center News*. <http://bit.ly/IgG6bl>.
- 2010 Volunteered in “Participatory Mapping” Imagining America conference site visit
- 2005 Coverage of volunteer research work in “Researchers Hope to Map, Identify Graves in Abandoned Cemetery.” *Diverse Issues in Higher Education*. <http://bit.ly/Jx7d2h>.

## Technical Proficiencies

### Mapping and GIS

- ArcGIS
- QGIS
- Mapbox, Tilemill
- Mapserver, Geoserver
- OpenStreetMap
- Google Earth, MyMaps
- Leaflet.js
- Omeka
- D3

### Programming and Scripting

- JavaScript (inc. Leaflet, D3, OpenLayers, JQuery, AJAX)
- Python (inc. ArcGIS geoprocessing, Geo/Django, Shapely, Fiona)
- PHP
- ActionScript
- C++ (a little)
- Java (minimal)
- R (minimal)

### Data and databases

- Geo/Topo/JSON
- MySQL
- PostGres
- NoSQL (a little Hadoop and MongoDB)

### Web Development

- Django
- GitHub (inc. Pages)
- Wordpress
- HTML/CSS
- Sahana
- Ushahidi

- Azure, Amazon Web Services

**Signed and dated:**

A handwritten signature in black ink that reads "Ryan Burns". The signature is written in a cursive, flowing style.

Ryan Burns, PhD

September 19, 2016