

# Isaac I.T. Ullah

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## ACADEMIC EMPLOYMENT

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- 2014–Present Postdoctoral Research Scholar, School of Human Evolution and Social Change, Arizona State University, Tempe, AZ.
- 2013–2014 Visiting Scholar, Center for Comparative Archaeology, University of Pittsburgh, Pittsburgh, PA.
- 2012–2013 Visiting Assistant Professor of Anthropology, Department of Anthropology, University of Notre Dame, Notre Dame, IN.

## EDUCATION

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- 2013 Ph.D., Anthropology. Arizona State University.
- 2003 M.A., Anthropology. University of Toronto.
- 2001 B.S., Anthropology. University of California, Davis.

## RESEARCH INTERESTS

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Long-term human eco-dynamics  
Landscapes, geoarchaeology, and earth-surface dynamics  
Plant and animal domestication and intensification

## GRANTS, FELLOWSHIPS, AND AWARDS

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### *Research Grants*

- 2014–2016 *New Perspectives in Archaeology: The Socio-ecological Agent-based Modeling of the Early Bronze Age I of Arslantepe (Malatya)*. PI: B. Arıkan. Foreign Researchers: **I.I.T. Ullah**, and S. Bergin (PI's/CI's limited to Turkish nationals only). Research grant from TUBITAK, The Scientific and Technological Research Council of Turkey, Research and Development Funding Program. Amount received: \$30,000.
- 2013–2017 *The Emergence of Coupled Natural and Human Landscapes in the Western Mediterranean*. PI: C.M. Barton. CI's: S. Sarjoughian, A. Heimsath, M. Acevedo, J. Riel-Salvatore. Senior Personnel: E. Vivoni, J. Bernabeu, **I.I.T. Ullah**. Dynamics of Coupled Natural and Human Systems grant from the National Science Foundation. Amount received: \$1,300,000
- 2013–2015 *Archaeological Survey and the Neolithic of the Levant*. PI's: E.B. Banning and S.T. Stewart. Collaborator: **I.I.T. Ullah**. Insight grant from the Social Sciences and Humanities Research Council of Canada. Amount received: \$282,000

### **Research Grants In Preparation**

*Slow Recovery: Land Use and Human Impacts in Post-Contact Southern Arizona.* PI's: **I.I.T. Ullah** and J.S. Watts. In preparation for submission to the CNH program of the NSF, Fall, 2015.

### **Fellowships**

2011–2012 Arizona State University Dean's Fellow. Amount: \$30,000/year.

2008–2010 Arizona State University Dean's Advanced Scholar.. Amount: \$35,000/year.

### **Awards**

2010 University Consortium for Geographic Information Science Student Paper Award

## **AFFILIATIONS**

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### **Affiliations and Professional Memberships**

Society for American Archaeology; CHANS-Net: International Network of Research on Coupled Human and Natural Systems; Community Surface Dynamics Modeling System – Anthropocene Working Group; ASU Center for Social Dynamics and Complexity

## **PUBLICATIONS**

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### **Articles in Peer-Reviewed Journals**

- n.d. **Ullah, I.I.T.** *Integrating older survey data into modern research paradigms: Identifying and correcting spatial error in “legacy” datasets.* Advances in Archaeological Practice. Status: Accepted for publication, 8/7/2015. Expected print date, 10/2015.
- 2015 **Ullah, I.I.T.**, Kuijt, I., and Freeman, J.F. *Toward a theory of punctuated subsistence change.* Proceedings of the National Academy of Sciences. Status: Accepted, available ahead of print online, 06/20/2015. doi:10.1073/pnas.1503628112
- 2015 **Ullah, I.I.T.**, Duffy, P.R., and Banning, E.B. *Modernizing spatial micro-refuse analysis: New methods for collecting, analyzing, and interpreting the spatial patterning of micro-refuse from house-floor contexts.* Journal of Archaeological Method and Theory. Status: Accepted, available ahead of print online, 10/19/2014. doi: 10.1007/s10816-014-9223-x
- 2015 Barton, C.M., **Ullah, I.I.T.**, and Heimsath, A. *How to make a Barranco: Modeling socioecological dynamics of landscape change in the Mediterranean.* Land, 4(3), 578-606. Special issue entitled, “Agent-Based Modelling and Landscape Change”, guest edited by J. Millington and J. Wainwright.
- 2012 Barton, C.M., **Ullah, I.I.T.**, Bergin, S.M., Mitsova, H., and Sarjoughian, H. *Looking for the future in the past: Long-term change in socioecological systems.* Ecological Modeling, Special Issue: Modeling Across Millennia. 241(0):42-53.
- 2011 **Ullah, I.I.T.** *A GIS method for assessing the zone of human-environmental impact around archaeological sites: a test case from the Late Neolithic of Wadi Ziqlâb, Jordan.* Journal of Archaeological Science. 38(3):623-632.
- 2010 Barton, C.M., **Ullah, I.I.T.**, and Bergin, S. *Land use, water and Mediterranean landscapes: Modelling long-term dynamics of complex socio-ecological systems.*

- Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences. 368(1931):5275 -5297.
- 2010 Barton, C.M., **Ullah, I.I.T.**, and Mitasova, H. *Computational modeling and Neolithic socioecological dynamics: A case study from Southwest Asia*. American Antiquity. 75(2):364-386.

### **Books**

**Ullah, I.I.T.** *Neolithic Human Landuse in Northern Jordan: A Simulation Modeling Approach*. Under contract for publication by Arizona State University Anthropological Research Papers. Status: In revision. Initial copy edit and editorial comments received, 8/30/2015. Expected 2016 publication date.

### **Articles in Edited Volumes**

- 2015 Sarjoughian, H., Mayer, G., **Ullah, I.I.T.**, and Barton, C.M. *Managing Hybrid Model Composition Complexity: Human–Environment Simulation Models*. In: Levent Yilmaz (Ed.), Concepts and Methodologies for Modeling and Simulation. Springer, 107-134. DOI: 10.1007/978-3-319-15096-3
- 2013 Mitasova, H., Barton, C.M., **Ullah, I.I.T.**, Hofierka, J., and Harmon, R.S., *GIS-based soil erosion modeling*. In: Treatise in Geomorphology, Vol. 3: Remote Sensing and GIScience in Geomorphology. Academic Press, San Diego. pp. 228-258
- 2012 **Ullah, I.I.T.** *Particles from the past: microarchaeological spatial analysis of ancient house floors*. In: Parker, B.J., Foster, C.P. (Eds.), New Perspectives in Household Archaeology. Eisenbrauns, Winowna Lake, pp. 123–138.
- 2012 **Ullah, I.I.T.**, and Bergin, S.M. *Modeling the consequences of village site location: Least cost path modeling in a coupled GIS and agent-based model of village agropastoralism in eastern Spain*, in: White, D.A., Surface-Evans, S.L. (Eds.), Least Cost Analysis of Social Landscapes: Archaeological Case Studies. University of Utah Press, Salt Lake City, pp. 155–173.
- 2009 **Ullah, I.I.T.** *Within-room spatial analysis of activity areas at Late Neolithic Tabaqat Al-Buma, Wadi Ziqlab, Al Koura, Jordan*. In: Studies in the History and Archaeology of Jordan, X. The Department of Antiquities of Jordan, Amman, pp. 87-95.

### **Peer-Reviewed Computer Software**

- 2015 Barton, C.M., **Ullah, I.I.T.**, Mayer G., Bergin, S., Sarjoughian, H., and Mitasova, H. *MedLanD Modeling Laboratory v.1* - A hybrid modeling environment that couples an agent-based model of small-holder agropastoral households and a cellular landscape evolution model that simulates changes in erosion/deposition, soils, and vegetation. Retrievable from: CoMSES Computational Model Library, [www.openabm.org/model/4609/version/1](http://www.openabm.org/model/4609/version/1)

### **Publicly Available Computer Software**

- 2015 **Ullah, I.I.T.** *AgModel, v.0.3* - An agent-based model of a potential scenario for the forager-farmer transition written. Retrievable from: GitHub, [dx.doi.org/10.5281/zenodo.17551](https://doi.org/10.5281/zenodo.17551)
- 2015 Ullah, I.I.T. *r.viewshed.cva* - A GRASS GIS module that undertakes a “cumulative viewshed analysis” using a vector points map as input “viewing” locations.

- Retrievable from: [GRASS Addons Repository, svn.osgeo.org/grass/grass-addons/grass7/raster/r.viewshed.cva/](http://svn.osgeo.org/grass/grass-addons/grass7/raster/r.viewshed.cva/)
- 2014 **Ullah, I.I.T.**, Barton, C.M., Mitsova, H. *r.landscape.evol* – A GRASS GIS module that simulates the cumulative effect of erosion and deposition on a landscape over time. Retrievable from: [GRASS Addons Repository, svn.osgeo.org/grass/grass-addons/grass7/raster/r.landscape.evol/](http://svn.osgeo.org/grass/grass-addons/grass7/raster/r.landscape.evol/)
- 2014 **Ullah, I.I.T.** *r.floorsim* – A GRASS GIS module that simulates artifact deposition on a housefloor, with site formation disturbance, sampling, and re-randomization. Retrievable from: [GRASS Addons Repository, svn.osgeo.org/grass/grass-addons/grass6/raster/r.floorsim/](http://svn.osgeo.org/grass/grass-addons/grass6/raster/r.floorsim/)
- 2014 **Ullah, I.I.T.** *r.soildepth* – A GRASS GIS module that estimates soil depths on a landscape based on hillslope curvatures. Retrievable from: [GRASS Addons Repository, svn.osgeo.org/grass/grass-addons/grass6/raster/LandDyn/r.soildepth.py/](http://svn.osgeo.org/grass/grass-addons/grass6/raster/LandDyn/r.soildepth.py/)
- 2011 **Ullah, I.I.T.** *r.catchment* - A GRASS GIS module that creates a raster buffer of specified area around vector points using cost distances. Retrievable from: [GRASS Addons Repository, svn.osgeo.org/grass/grass-addons/grass7/raster/r.catchment/](http://svn.osgeo.org/grass/grass-addons/grass7/raster/r.catchment/)

#### **Reports and Non-reviewed Publications**

- 2015 Banning, E.B., Gibbs, K., **Ullah I.I.**, Hitchings, P., Abu Jayyab, K., Edwards, S., and Rhodes, S. *Archaeological Excavations in Wadi Quseiba and Wadi al-Bîr, northern Jordan*. [Antiquity Project Gallery](http://antiquity.ac.uk/projgall/508). 344. <http://antiquity.ac.uk/projgall/508>
- 2014 Banning, E.B., Abu Jayyab, K., Elendari, R., Gibbs, K., Hitchings, P., Hosseinmardi, G., Jablonkay, D., Al Jarrah, H., Letham, B., Razzaz, S., Rhodes, S., **Ullah, I.I.T.**, and Velgakis, J., and Weston, R. *Archaeological excavations in Wadi Quseiba and Wadi al-Bîr, northern Jordan, 2014*. Report on file with the Department of Antiquities of Jordan, Amman.
- 2013 Banning, E.B., Hitchings, P., Abu Jayyab, Elendari, R., K. Gibbs, K., Jablonkay, D., Al Jarrah, H., Letham, B., Razzaz, S., **Ullah, I.I.T.**, and Weston, R. *Archaeological survey in Wadi Qusayba and the Mandah Plateau, Irbid Region, Jordan, 2013*. Report on file with the Department of Antiquities of Jordan, Amman.
- 2012 **Ullah, I.I.T.** *Chapter IIb - Neixon 2011, Artifact density studies*, in: Fábregas Valcarce, R., Bonilla Rodríguez, A. (Eds.), Boiro: 5000 Anos De Cambio Climático E Explotación Do Medio No Marco De Arousa Norte Sondaxes Arqueolóxicas. E Labores De Restauo No Complexo Dos Castros Do Neixón (The Concello De Boiro and Centro Arqueolóxico Do Barbanza), Memoria Técnica. The Concello de Boiro and Centro Arqueolóxico do Barbanza.
- 2008 **Ullah, I.I.T.**, Schuldenrien, J., and Smith, M. *Preliminary report of the 2008 season of the Wadi Hasa Ancient Pastoralism Project*. Report on file with the Department of Antiquities of Jordan, Amman.

#### **Reviews**

- 2014 **Ullah, I.I.T.** Review of: *Mediterranean Archaeological Landscapes: Current Issues*. [Geoarchaeology](http://www.geoarchaeology.net). 29(2), March/April, 2014.
- 2007 **Ullah, I.I.T.** Review of: *Human Ecology in the Wadi Al-Hasa: Land Use and Abandonment through the Holocene*. [American Anthropologist](http://www.americananthropologist.org). 109(1):216.

- 2002 Gibbs, K., Kadowaki, S., and **Ullah, I.I.T.** *Domesticating Space: Notes on the Toronto Conference.* Neo-Lithics. 1/02:21-22.

#### **Works Submitted**

Barton, C.M., **Ullah, I.I.T.**, Bergin, S.M., Sarjoughian, H.S., Mayer, G.R., Bernabeu Auban, J.E., Heimsath, A.M., Acevedo, M.F., Riel-Salvatore, J.G., and Arrowsmith, J.R. *Experimental Socioecology: Integrative Science for Anthropocene Landscape Dynamics.* Anthropocene. Submitted, 09/01/2015.

#### **Works in Progress**

**Ullah, I.I.T.**, Chang C., and Tourtellette, P. *Landscapes of visibility and flow: Kurgans and settlements in Talgar, Kazakhstan.* With C. Chang. Intended for Antiquity.

Barton L. and **Ullah, I.I.T.** *A dynamic behavioral ecology model of early domestication processes.* Intended for Journal of Anthropological Archaeology.

**Ullah, I.I.T.** and Arikan, B. *Computer-based simulation of surface-processes, and digital reconstruction of paleoenvironment during the Early Bronze Age-I at Arslantepe–Malatya, Eastern Turkey.* Intended for Geoarchaeology.

### **TEACHING EXPERIENCE**

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#### **University Courses**

2013–2014 academic year. University of Pittsburgh, Pittsburgh, PA.

“Complex Adaptive Systems & Computational Modeling.” Graduate seminar.

2012–2014 academic year. University of Notre Dame, Notre Dame, IN.

“Sustainability: Past and present.” Upper division cross-listed elective course.

“Life on the move: Pastoral lifeways in archaeological and ethnographic contexts.” Upper-division elective seminar course.

“Fundamentals of Archaeology.” Lower-division core-curriculum course.

“Anthropology: Humans 360.” Lower-division introductory course.

2011 Summer session. Arizona State University, Tempe, AZ.

“Castro de Néixon International Field School.” Summer field-school, core-curriculum course.

2010 & 2011, Fall semesters. Mesa Community College, Mesa, AZ.

“Buried Cities and Lost Tribes – Old World.” Lower-division introductory course.

### **RESEARCH**

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#### **Major Research Projects**

Mediterranean Landscape Dynamics Project

*Position:* Senior Researcher and Co-director of Field Work and Modeling Research . *Host Institution:* Arizona State University. *Principle Investigator:* C.M. Barton. *Field work locations:* Jordan, Spain, Italy. *Objective:* Interdisciplinary project investigating early coupled human-natural systems in the Mediterranean, combining field survey with computational modeling. *Period of affiliation:* 2005–Present.

#### Wadi Ziqlab and Wadi Quseiba Projects

*Position:* Senior Researcher and Co-director of Field Work. *Host Institution:* University of Toronto. *Principle Investigator:* E.B. Banning. *Field work location:* Wadi Ziqlab and Wadi Quseiba, Jordan. *Objectives:* Investigation of Neolithic communities and land-use through geoarchaeological survey and excavations at project areas in northern Jordan. *Period of affiliation:* 2004–Present.

#### Socio-ecological Agent-based Modeling of the Early Bronze Age I of Arslantepe

*Position:* Senior Researcher and Co-director of Modeling Research. *Host Institution:* Istanbul Technical University. *Principle Investigator:* Bülent Arıkan. *Field work Location:* Malatya region, Turkey. *Objective:* Interdisciplinary project investigating the influence of climate change on Bronze Age peoples in the upper Euphrates Basin. *Period of affiliation:* 2013–Present .

#### Bova Marina Archaeological Project

*Position:* Co-Director of the San Pasquale Historic Houses Survey. *Host Institution:* University of Notre Dame, Cambridge University. *Principle Investigators:* Meredith Chesson and John Robb. *Field work Location:* Bova Marina, Italy. *Objectives:* Deep-time understanding of human land-use in the project region. *Period of affiliation:* 2015–Present.

#### Kazakh-American Talgar Archaeology Project

*Position:* Researcher. *Host Institution:* Sweet Briar College. *Principle Investigator:* Claudia Chang. *Field work Location:* Talgar, Kazakhstan. *Objective:* Geoarchaeological investigations of Bronze and Iron Age landuse and human-environment co-evolution. *Period of affiliation:* 2011–Present .

#### Wadi Hasa Ancient Pastoralism Project

*Position:* Project Director. *Host Institution:* ASU, SHESC. *Field work location:* Wadi al-Hasa, Jordan. *Objective:* Survey for Neolithic pastoral sites in the desert margins. *Period of affiliation:* 2008–2009.

### CONFERENCE PRESENTATIONS

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#### *Symposia Organized*

- 2012 “Socio-natural systems in pastoral and agro-pastoral societies: Archaeological investigations of pastoral landscapes.” 77<sup>th</sup> annual meeting of the Society of American Archaeology in Memphis, TN. Co-organizer: Claudia C. Chang.

#### *Invited Papers*

- n.d. **Ullah, I.I.T.**, *Traces of complexity: connecting model output with archaeological reality*. In preparation for the symposium: “Human-Environmental Interactions in the Mediterranean Basin.” 81<sup>st</sup> Annual Meeting of the Society for American Archaeology, Orlando. FL. April 6–10, 2016.
- 2015 **Ullah, I.I.T.**, and Barton, C.M., *Complexity in space and time: spatio-temporal variability and scale in simulations of social-ecological systems*. Symposium: “Simulating Social Complexity to Understand the Archaeological Past.” 80<sup>th</sup> Annual Meeting of the Society for American Archaeology, San Francisco. CA. April 15–19, 2015.
- 2014 **Ullah I.I.** *Computer-based simulation of surface-processes, and digital reconstruction of paleoenvironment during the Early Bronze Age-I at Arslantepe–*

- Malatya, Eastern Turkey. Symposium: “*Environmental Change: Data, Processes, and Integrated Modeling.*” 20<sup>th</sup> Annual Meeting of the European Archaeological Association, Istanbul, Turkey. September 10–14, 2014.
- 2014 **Ullah I.I.** *From a world of compasses, paper, and pencils to the digital era: how to integrate “pre-GPS” survey data into a modern research paradigm.* Symposium “*Paleolithic Paradigms: Papers in Honor of Geoffrey Clark.*” 79<sup>th</sup> Annual Meeting of the Society for American Archaeology, Austin, TX. April 23–27, 2014.
- 2014 Banning, E.B., and **Ullah I.I.** *In Small Things Miscounted: Problems, Solutions and Opportunities of Scale in Microrefuse Analysis.* Symposium: “*Multi-scalar Approaches to Archaeological Interpretation.*” 79<sup>th</sup> Annual Meeting of the Society for American Archaeology, Austin, TX. April 23–27, 2014.
- 2014 **Ullah I.I.**, and Barton, C.M. *Mediterranean Landscape Dynamics Project II.* Symposium: “*DDIG Lightning Talks.*” Digital Data Interest Group business meeting. 79<sup>th</sup> Annual Meeting of the Society for American Archaeology, Austin, TX. April 23–27, 2014.
- 2013 **Ullah, I.I.T.** and Barton, C.M., *Simulating “collapse”: A computational modeling approach to understanding adaptive reorganization in low-level socio-natural systems.* Symposium: “*New Directions in Modeling Dynamics in Coupled Social-Natural Systems.*” 78<sup>th</sup> annual meeting of the Society of American Archaeology, Honolulu, HI.
- 2012 **Ullah, I.I.T.**, *Simulating the long-term effects of agropastoral landuse decisions: a computational modeling approach to the Prepottery/Pottery Neolithic transition in northern Jordan.* Symposium: “*Socio-natural systems in pastoral and agro-pastoral societies: Archaeological investigations of pastoral landscapes.*” 77<sup>th</sup> annual meeting of the Society of American Archaeology, Memphis, TN.
- 2012 Bergin, S., **Ullah, I.I.T.**, Barton, C.M., and Gravel-Miguel, C., *Human-Environment Interactions in a Changing Environment: A Computational Model of Agropastoral Practices and Landscapes in Neolithic Spain.* Symposium: “*Socio-natural systems in pastoral and agro-pastoral societies: Archaeological investigations of pastoral landscapes.*” 77<sup>th</sup> annual meeting of the Society of American Archaeology, Memphis, TN.
- 2011 **Ullah, I.I.T.**, Barton, C.M., Bergin, S., and A. Miller. *Simpler is better: lessons from modeling coupled human and natural systems in the Mediterranean Landscape Dynamics Project.* Symposium “*Process and Change in Prehistoric Socio-Natural Systems.*” 76<sup>th</sup> annual meeting of the Society of American Archaeology, Sacramento, CA.
- 2011 Bergin, S., **Ullah, I.I.T.**, Arikian, B., Barton, C.M., Sarjoughian, H., and G. Mayer. *Simulating Neolithic Landscape Dynamics: A Coupled ABM-GIS Model of Agro-Pastoral Systems in Eastern Spain.* Symposium: “*Process and Change in Prehistoric Socio-Natural Systems.*” 76<sup>th</sup> annual meeting of the Society of American Archaeology, Sacramento, CA.
- 2010 **Ullah, I.I.T.** *A GIS method for assessing the zone of human-environmental impact around archaeological sites: a test case from the Late Neolithic of Wadi Ziqlâb,*

- Jordan. 2010 Summer Assembly of the University Consortium for Geographic Information Science. Hilton Head Island, SC.
- 2009 **Ullah I.I.** *Particles from the Past: A Diachronic Study of the Spatial Patterning of Microrefuse from Room Floors at Late Neolithic Tabaqat al-Bûma, Northern Jordan.* Household Archaeology in the Middle East and Beyond: Theory, Method and Practice Conference. Feb 19-21, Salt Lake City.
- 2009 **Ullah, I.I.T.,** Mayer, G.R., Barton, C.M., Sarjougian, H.S. *Ancient Mediterranean landscape dynamics: Hybrid agent and geospatial models as a new approach to socioecological simulation.* Symposium: “Parallel Worlds: Interdisciplinary Agent-Based Models of Socioecological Processes and Complexity.” 73<sup>rd</sup> Annual Meeting of the Society for American Archaeology, Vancouver, BC.

### **Contributed Papers**

- 2015 Gibbs, K., Banning, E.B., **Ullah I.I.,** Hitchings, P., and Abu Jayyab, K. *Late Neolithic Excavations in Wadi Qusayba, Northern Jordan.* 2015 ASOR Annual Meeting, San Diego, CA.
- 2010 Barton, C. M., **Ullah, I.I.T.,** Mayer, G., Sarjoughian, H., Bergin, S., Miller, A., and H. Mitasova. *Coupled Models for Coupled Systems: Land-Use and Landscape Dynamics in the Mediterranean.* 2010 Annual Meeting of the Association of American Geographers. Washington, D.C.
- 2010 Bergin, S., **Ullah, I.I.T.,** Barton, C.M., Mayer, G., and H. Sarjoughian. *Coupled ABM-GIS Modeling of Agro-Pastoral Systems in Eastern Spain.* 75<sup>th</sup> annual meeting of the Society of American Archaeology, St. Louis, MO.
- 2010 **Ullah, I.I.T.** *Assessing the accuracy of microrefuse sampling techniques.* 75<sup>th</sup> annual meeting of the Society of American Archaeology, St. Louis, MO.
- 2009 Bergin, S., **Ullah, I.I.T.,** and G. Mayer. *A Coupled ABM-GIS model of small-scale farming.* North American Association for Computational Social and Organizational Sciences Meeting, Tempe, AZ.
- 2009 **Ullah I.I.** *Ancient Pastoralism and Landscape Change in South Central Jordan.* 74<sup>th</sup> Annual Meeting of the Society for American Archaeology, Atlanta, GA.
- 2007 **Ullah, I.I.T.,** *Microarchaeology and the Use of Space at the Late Neolithic Farmstead of Tabaqat al-Bûma.* 10<sup>th</sup> International Conference on the History and Archaeology of Jordan, The George Washington University, Washington, DC.
- 2007 **Ullah I.I.,** and Barton, C.M., *Alternative Futures of the Past: Modeling Neolithic Landuse and Its Consequences in the Ancient Mediterranean.* 72<sup>nd</sup> Annual Meeting of the Society for American Archaeology, Austin, TX.
- 2006 DiMaggio, E.N., Arrowsmith, J.R., Barton, C.M., Sarjoughian, H.S., Fall, P., Falconer, S.E., and **Ullah, I.I.T.,** *Geomorphic Mapping and Paleoterrain Generation for use in Modeling Holocene (8,000 – 1,500 yr) Agropastoral Landuse and Landscape Interactions in Southeast Spain.* 2006 American Geophysical Union annual meeting, San Francisco, CA.
- 2006 Barton, C.M. and **Ullah, I.I.T.,** *Modeling Impacts of Landuse Practices on Mediterranean Landscapes.* 2006 Archaeological Sciences of the Americas Symposium. University of Arizona, Tucson, AZ.



- 2006 **Ullah, I.I.T.**, *GIS and Pastoralists in Beidha, Southern Jordan: Predictive Modeling of Campsite Location*. 2006 Annual Conference of WECSOR/ASOR Pacific Southwest Region, Claremont Graduate University, Claremont, CA.

## **SERVICE**

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### **Professional Workshops**

Open Source Geospatial Tools for Anthropologists. Invited workshop to be given at University of Notre Dame, Department of Anthropology, December 1–4, 2015. To be co-taught with M. Sisk of UND Library.

Paleolandscape Reconstruction and Ancient Human Landuse: A GIS Workshop. (2 sessions, 8 hours each). University of Toronto Archaeology Center. Fall, 2009.

GRASS GIS for Anthropologists. SHESC Graduate Workshop Series. Fall term, 2006. (2 sessions, 2 hours each). Arizona State University. Fall, 2006.

### **Departmental Service**

Mentor for incoming graduate students. *School of Human Evolution and Social Change Association of Anthropology Graduate Students*, Arizona State University, Tempe, Arizona. (2008-2012). Member of executive council. *Anthropology Graduate Student Union*, University of Toronto, Toronto, ON. (2002-2003 Academic Year)

### **Editorial**

Review Editor, *Frontiers in Digital Archaeology*. 2015-current.

### **Peer Reviewer**

Reviewer: *Journal of Archaeological Research*; *Advances in Archaeological Practice*; *Journal of Archaeological Sciences*; *Computation*; *Southeast Archaeological Review*

### **Public Lectures**

*Simulating the consequences of early farming strategies: a computational modeling approach to understanding long-term socio-ecological dynamics in low-level agropastoral systems*. University of Pittsburgh, Department of Anthropology colloquium series. Fall term, 2013.

*The Neolithic period in Jordan: Daily life in early farming villages*. Mesa Community College Cultural Science brown bag series. Spring term, 2011.

## **OTHER PROFESSIONAL EXPERIENCE**

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### **Teaching Positions**

2010–2011 Adjunct faculty, Cultural Sciences Department, Mesa Community College, Mesa, AZ.

### **Professional Archaeological Positions**

2001–2005 Numerous Cultural Resource Management projects in California, Nevada, and Utah. Employers: Far-Western Anthropological Research Group, Inc., and Pacific Legacy, Inc. Further details available upon request.

## **MEDIA COVERAGE**

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### ***Summary News Articles***

- 2015     *“Analyzing the Neolithic Revolution.” Archaeology Magazine, Online. July 24, 2015.*
- 2015     *“New Research Reveals Clues of Neolithic Revolution.” New Historian. July 22, 2015.*
- 2015     *“Archaeologists use new methods to explore move from hunting, gathering to farming.” Phys.org. July 21, 2015*

### ***Editorials***

- 2010     *“Living in the Past and Looking Toward the Future. Archaeologists develop models to explain agricultural history, future.” Chris Gorski, Inside Science, July 29, 2010.*