Dana M. Habeeb

tel: 404.242.8593 email: dhabeeb@indiana.edu

EDUCATION

Georgia Institute of Technology 2017
PhD, City and Regional Planning

Major: Environmental Planning | Urban Climatology; Minor: Urban Morphology

Dissertation: *"Exploring Urban Agriculture as a Climate Change Mitigation Strategy at the Neighborhood Scale"*

Georgia Institute of Technology 2008
Masters, City and Regional Planning

Georgia Institute of Technology 2008
Masters, Architecture

Georgia Institute of Technology 2002
BS, Architecture

ACADEMIC POSITION

Assistant Professor in Environmental Health Informatics August, 2018 - Present
Indiana University
School of Informatics, Computing, and Engineering

Adjunct Faculty 2021- Present
Indiana University
Department of Geography

Visiting Assistant Professor in Environmental Health Informatics 2017- 2018
Indiana University
School of Informatics, Computing, and Engineering

ACADEMIC AFFILIATIONS

Urban Green Infrastructure Research Group, 2018 – Present
Indiana University

Environmental Resilience Institute, 2018 – Present
Indiana University

Integrated Program in the Environment, 2019 - Present
Indiana University

ACADEMIC RECOGNITION

Fellow, Grant Thornton Institute for Data Exploration for Risk Assessment and Management (GT-IDEA), Indiana University, 2020- 2023
Campus Sustainability Advisory Board, 2023
Advisory Board for the Environmental Resilience Institute, 2022 – Present
Department of Informatics COVID Teaching Award, Indiana University, 2021
Carnegie Fellow (Junior Scholar) IU Nominee, 2020
Sustainability Course Development Fellowship, Indiana University, 2019
Sustainability Community of Practice Fellow, Indiana University, 2019
NSF CRII Award, 2019
United States Environmental Protection Agency 2018 Climate Change Indicator (Heat Waves) - based on my published research and released by the US Global Change Research Program, https://www.globalchange.gov/browse/indicators/us-heat-waves. My heat wave research was adapted by the EPA and is one of sixteen climate change indicators used by the federal government.
Heat wave research included in Fourth National Climate Assessment Report, 2018, Chapter 1 Overview. The report also cites two of my previous research publications. https://nca2018.globalchange.gov/chapter/1/
Association of Collegiate Schools of Planning Travel Scholarship Recipient 2015
Sea level rise studio wins American Institute of Certified Planners *2014 Student Project Award*
Sea level rise studio wins the Georgia Planning Association *Outstanding Student Project Award*
College of Architecture NSF ADVANCE Women of Excellence Graduate Award
City and Regional Planning Service Award
Randall-Paulson Architects Writing Scholarship
PEDS Golden Shoe Award: Design team member for Atlanta new street plan
Charles R. Brown Urban Design Fellowship

PUBLICATIONS (Book Chapters)

Filippelli, G., **Habeeb, D**., Wilson J., Reynolds H.L.. (2022, November) Equitability, Health and Resilience in the Face of Climate Change. *In:* J McCabe et al. (ed.) Climate Change and Resilience: Lessons for Hoosiers and Beyond, Indiana University Press. Bloomington, IN.

Reynolds, H L., Hamlin, S., **Habeeb, D**., Wilson, J., Meyers, S., Filippelli, G. (November, 2022) Built Environments and Green Infrastructure: Growing Long-lasting Urban Resilience. *In*: J McCabe et al. (ed) Climate Change and Resilience: Lessons for Hoosiers and Beyond, Indiana University Press. Bloomington, IN.

PUBLICATIONS (Peer Review)

Habeeb, D., Clawson, J., Zakeresfahani, A., & Holtz, Z. (2022, April). Investigating and Validating On-body Temperature Sensors for Personal Heat Exposure Tracking. In CHI Conference on Human Factors in Computing Systems (pp. 1-14).

Stone B Jr, Vargo J, Liu P, **Habeeb D**, DeLucia A, Trail M, Hu Y, Russell A (2018) Avoided Heat- Related Mortality through Climate Adaptation Strategies in Three US Cities. In Infeld et al. (Ed.), *Planning for Climate Change: A Reader in Green Infrastructure and Sustainable Design for*

Resilient Cities. New York, NY: Routledge. (Reprinted from "Avoided Heat- Related Mortality through Climate Adaptation Strategies in Three US Cities", 2014, PloS ONE, 9(6), 1-8.)

Vargo, J., Stone, B., **Habeeb, D**., Liu, P., Russell, A. (2016) The Social and Spatial Distribution of Temperature-related Health Impacts from Urban Heat Island Reduction Planning Strategies. *Environmental Science and Policy,* 66, 366-374

Habeeb, Dana, Vargo, Jason and Stone, Brian Jr. (2015) Rising heat wave trends in large US cities. *Natural Hazards* 76(3): 1651-1665. doi:10.1007/s11069-014-1563-z

Stone B Jr, Vargo J, Liu P, **Habeeb D**, DeLucia A, Trail M, Hu Y, Russell A (2014) Avoided Heat-Related Mortality through Climate Adaptation Strategies in Three US Cities. PloS ONE 9(6):

Vargo, Jason, **Habeeb, Dana**, and Stone, Brian Jr. (2013) The Importance of Land Cover Change Across Urban Rural Typologies for Climate Modeling. *Journal of Environmental Management*, 114, 243-252

Stone, Brian Jr., Vargo, Jason, and **Habeeb, Dana** (2012). Managing climate change in cities: Will climate action plans work? *Landscape and Urban Planning*, *107*(3), 263-271

MANUSCRIPTS (In Review/In Progress for Refereed Journals/Conferences)

Habeeb D., Wilson, J., Byrne, A., Holtz, Z., Fabina, L. Identifying Local Climate Zones in US. Midwestern Cities: A Comparison of Methods (*In Progress*).

Habeeb, D., and Miya, S. Categorization of Extreme Heat Response Plans in the United States: Are Cities Ready? (*In Progress*)

Mincey, S.K., Hamlin, S., Reynolds, H., **Habeeb, D**., S. Freeman-Day, H. Gregory, C. McGill. (In prep) Urban Forest and Racial Justice Manuscript

Habeeb, D., Unabia, G., Urbina, O., Cantor., G. Improving the Reliability of Wearable Temperature Sensors: Prototyping 3D Printed Solar Radiation Shields (In Progress)

Habeeb, D., Wilson, J., Sunil, N., Urban Temperature Interpolation: Utilizing in-Situ and Satellite Data for Hyperlocal Temperature Prediction. (*In Progress*)

PUBLICATIONS (Technical Reports/White Papers)

Habeeb, Dana (2019) Environmental Sensing and Community Health. Joint Sorbonne Université and Indiana University Symposium on A.I. (SUIUAI19), Sorbonne Université – Paris, Campus Pierre et Marie Curie

Habeeb, Dana (2019) Monitoring Heat Stress through Environmental Sensing. "Social Justice and Equity in the Engineering of Smart and Connected Cities" a workshop as part of the NSF-funded SCC-RCN entitled, *MOHERE: Mobility, Health, and Resilience: Building Capacities and Expanding Impact* (Invited Panelist for Environment, Climate and Equity)

Etienne, Harley and Habeeb, Dana (2012) Georgia Coastal Vulnerability: a proposal for the study of social vulnerability in Chatham, Liberty and McIntosh Counties, The Georgia Conservancy.

Habeeb, Dana (2010). A Cabbagetown History. Atlanta Chapter of the Congress for the New Urbanism, Building Metropolitan Atlanta: Past, Present & Future, 95-96. Atlanta

TOOLS & ARTIFACTS

"Beat the Heat – Community Survey" – Survey for Community Heat Risk, Awareness, and Preparedness. Survey used by multiple municipalities across the county.

"Indiana Green City Mapper" Online Data Platform for Green Infrastructure, Climate and Social Vulnerability Data. https://indiana-green-city-mapper-iu.hub.arcgis.com

Local Climate Zone Classification. Google Earth Engine JavaScript for Bloomington, IN, Indianapolis, IN, and the State of Indiana *(in progress)*

GRANTS AWARDED
Total Award Amount: $1,098,256 (PI: $501,282; Co-PI/Co-I: $596,794)

IU OVPR The Program for Faculty Assistance in Data Science (FADS). Extreme Heat: Mapping, Visualization, and Communication, May 2022- August 2022**. Faculty Advisory: Dana Habeeb**

NSF CNS-2228703 CIVIC-PG Track A - Developing Community-Informed Strategies for Increased Longevity of Urban Trees to Mitigate Climate Change, 2022-2023($80,000) PI: H. Navarro, Co-PIs: G. Filippelli, S. Mincey, Collaborator: **D.Habeeb**

Environmental Protection Agency (EPA) Environmental Justice Collaborative Problem-Solving Cooperative Agreement Program: *Greening Urban Neighborhoods from the Ground Up*, 2022-2024, ($99,920) **Co-PIs. D. Habeeb**, H. Reynolds, J. Wilson, G. Filippelli, SK Mincey

NSF Research Experience for Undergraduates (REU) Supplement for CRII: CHS, SCH: Monitoring Heat Stress Through Environmental Sensing. National Science Foundation (NSF), 2021-2022 ($16,000) **PI: Dana Habeeb.**

Indiana Office Community & Rural Affairs: *Extreme Heat Preparedness in Indiana Communities***,** April 1, 2021-April 30, 2023 ($310,763). **PI- Dana Habeeb**, Environmental Resilience Institute.

IU Racial Justice Research Fund (RJRF): **Access to sustainable urban tree benefits: A statewide assessment of racial equity and urban forest ecosystem service,** 2021-2022. ($14,996) PI: Sarah Mincey, **Co-PI Dana Habeeb,** Co-PI Heather Reynolds.

IU Institute for Advanced Study Collaborative Awards: SPUR: Social-ecological Planning for Urban Resilience, 2021-2023. ($9,989) PI: Heather Reynolds, Faculty Collaborators: **Dana Habeeb,** Sarah Mincey and Jeff Wilson.

NSF CRII: CHS, SCH: Monitoring Heat Stress Through Environmental Sensing. National Science Foundation (NSF) Award # 1850269 ,2019-2021 ($174,519) **PI: Dana Habeeb.**

Prepared for Environmental Change: Urban Green Infrastructure Inventory and Analysis. Indiana University Grand Challenge, 2019-2022. ($251,977) PI: Heather Reynolds, PI: Jeff Wilson, **Co-PI Dana Habeeb**, Co-PI Sarah Mincey, Co-PI Robert Montoya.

"Building a Climate, Soil, and Water Infrastructure" project managed by the Indiana Geological and Water Survey (IGWS). Indiana University Center for Rural Engagement, 2019 – 2021. ($140,092) PI: Shawn Naylor, Co-PI: Robert Autio, Co-PI Jon Eldon, **Co-PI Dana Habeeb**, Co-PI Sally Letsinger, Co-PI Polly Root Sturgeon, Co-PI David Wild

GRANTS UNDER REVIEW

NOAA: Urban Heat Island Mapping Campaign. May 2023- August 2023 ($15,000) Bloomington, Indiana. IU Organizer: **Dana Habeeb**

NSF CAREER: *Strengthening Climate Resilience through Community Engagement.* 2023-2028 ($584,104) NSF CAREER Solicitation. **PI: Dana Habeeb**

Minerva Research Initiative- White Paper: *Framework of Community Resilience to Unprecedented Climatic Events*. 2023-2027 ($3,000,000) **PI: Dana Habeeb,** Co-PI: Yong-Yeol Ahn; Co-PI: Travis O'Brien; Co-PI: Ben Kravitz

Luddy Faculty Fellowship program: *Strengthening Climate Resilience through Community Engagement.* 2022-2023 ($25,000) **PI: Dana Habeeb**

IDEM SEP- Safety-Kleen Systems, Inc. *City in a Garden*. 2020-2023 ($588,000) Project of Environmental Management (IDEM) Office of Air Quality (OAQ) Supplemental Environmental Projects (SEP), **PI: Dana Habeeb,** Co-PI: Sarah Mincey, Co-PI: Gabe Filippelli, Co-PI: Jess Vogt, Co-PI: Burney Fischer (Pandemic Delayed)

GRANTS UNFUNDED

NSF CAREER: *Extreme Heat Resiliency: Designing Interactive Technology for Empowerment, Engagement and Efficiency.* 2021-2026 ($579,104) NSF CAREER Solicitation. **PI: Dana Habeeb**

SCC-CIVIC-PG Track B**:** *Disaster Effects of Urban Heat Islands on Public Health and Infrastructure Systems.* 2021-2021. NSF Civic Innovation Challenge Solicitation. PI: Monique Head, **Co-PI: Dana Habeeb**, Co-PI: Monica Sanders, Co-PI: Sharad Sharma

NSF STC *Resilience Science for Urban Environments (RESCUE).* NSF Science and Technology Center solicitation. PI: Ellen Ketterson (Indiana U), Co-PI Luis Rocha (Indiana U), Co-PI Luis Bettencourt (U Chicago), Co-PI Alesandro Vespignani (Northeastern U), Co-PI Johan Bollen (Indiana U); Senior Personnel: Lázló Barabási (Northeastern U), Ana Bento (Indiana U), Eduardo Brondizio (Indiana U), Ilaria Capua (U of Florida), Keith Clay (Tulane U), Gabe Filippelli (Indiana U-Purdue U-Indianapolis), Marta Gonzalez (U California, Berkeley),

Dana Habeeb (Indiana U), Neo Martinez (Indiana U), Heather Reynolds (Indiana U), James Shanahan (Indiana U), Ilmi Yoon (San Francisco State U), Marten Scheffer (Wageningen U), Jeffrey Wilson (Indiana U-Purdue U-Indianapolis). 2020-2024

Sustain IU - Innovation Fund. *Indiana University Environmental Sensor Network*: **PI: Dana Habeeb**, Co-PI, Mike Girvin. 2020-2021($48,696)

Sustain IU - Innovation Fund. *Indiana University Environmental Sensor Network*: **PI: Dana Habeeb**, Co-PI, Mike Girvin. 2019-2020($48,696)

IU Faculty Research Support Program – Seed Funding. *Air Quality and Community Engagement*. 2019-2020 ($39,556) **PI: Dana Habeeb**

IU Faculty Research Support Program – Seed Funding. *Extreme Heat Emergency Response System for Communities in Indiana*. 2018-2019 ($39,720) **PI: Dana Habeeb**

IU Grand Challenge: Prepared for Environmental Change Solicitation. *Investigating the Role of Agriculture and Smart Watering for Extreme Heat Mitigation*. 2019-2020 ($61,884) **PI: Dana Habeeb**

NSF SCC: Neighborhood Air Quality Sensing: Leveraging Environmental Informatics to Empower Local Communities. NSF Smart and Connected Communities solicitation. 2019-2022 ($1,456,921) PI: James Clawson, **Co-PI: Dana Habeeb**.

REU GRANTS: FACULTY ADVISOR

IU Undergraduate Research (IUUR) Advanced Summer Research Scholarship (ASRS), *Urban Forest Equity in Indiana: Climate Resilience and Social Justice*. 2021($2500) Erin Hardman, Dana Habeeb: Faculty Advisor.

IU Undergraduate Research (IUUR) Advanced Summer Research Scholarship (ASRS), *Supporting Vulnerable Populations and Communities through Understanding Edible Food Systems and Urban Heat Mitigation Projects*. 2021($2000) Ava Hartman, Dana Habeeb: Faculty Advisor.

INVITED WORKSHOP & EXPERT PANEL

"AI and Big Data for Economic and Social Good" 6th Annual Smart Cities Technology Symposium & Exhibition, January 18-19, 2022 in Chicago (Virtual), January 18, 2022. (Invited Panelist).

"Beat the Heat: How Two Indiana Communities are Responding to Extreme Heat" 2021 NIHHIS-CAPA Urban Heat Island Mapping Campaign Webinar
December 14, 2021 (Invited panelists) https://www.youtube.com/watch?v=TUK_BSJyn2o

Roundtable Panel with IU Patten Lecture Visitor James Timberlake. *Sustainability & Technology in the Built Environment.* February 27, 2020. (invited panelist)

"Environmental Sensing and Community Health" Joint Sorbonne Université and Indiana University Symposium on A.I. (SUIUAI19) Sorbonne Université – Paris, Campus Pierre et Marie Curie June 24- 26, 2019. (Invited speaker for the A.I. symposium)

Journal of Planning Education & Research (JPER) Writing Workshop for New Scholars. Rutgers University, News Brunswick, NJ. July 17-19, 2019.

IU ERI Heat Expert Panelist. *Heat Metric - Hoosier Resilience Index.* February 6, 2019; May 16, 2019.

"Monitoring Heat Stress through Environmental Sensing". Social Justice and Equity in the Engineering of Smart and Connected Cities - a workshop as part of the NSF-funded SCC-RCN entitled, *MOHERE: Mobility, Health, and Resilience: Building Capacities and Expanding Impact* in Seattle, WA. December 2018 (Invited Panelist for Environment, Climate and Equity)

Vertical Agriculture Design workshop hosted by Georgia Tech, City of Atlanta, Perkins + Will, and Blue Planet, Design Panelist and Judge, Atlanta, GA. November 2015

INVITED TALKS / KEYNOTES

"Beat the Heat: Responding to Extreme Heat in Clarksville, Indiana," Kentuckiana Regional Planning & Development Agency (KIPDA). July13, 2022

"How Two Indiana Communities are Responding to Extreme Heat", Environmental Resilience Institute (ERI) Community of Practice Webinar, Resilience Cohort, April 22, 2022

"Beat the Heat: Engaging Communities to Better Plan and Prepare for Extreme Heat" Distinguished Lecture, Environmental Resilience Institute (ERI) Indiana Advisory Board. Indiana University. November 17, 2021

"Local Climate Zones: Urban Typologies for Ambient Heat" Environmental Resilience Institute (ERI) Data Summit. Indiana University. May 21, 2021. https://tinyurl.com/2p8edwyz

"Environmental Sensing and Community Health" Grant Thornton-IDEA Scholar Webinar. Indiana University. April 30, 2021

"Extreme Heat Vulnerability: How We Can Protect and Empower Communities" Integrated Program on the Environment and the Environmental Resilience Institute Speaker Series. Indiana University. October 16, 2020 https://tinyurl.com/2p8edwyz

"How the Changing Climate Affects our Health" - Prepared for Environmental Change Webinar Series, Indiana University. September 11, 2019

"Resiliency: Planning for Climate Change" UCLA Luskin School of Public Affairs Department of Urban Planning in Los Angeles, CA. January 2018

"Resiliency: Planning for Climate Change" University of Florida, College of Design Construction and Planning in Gainesville, FL. October 2017

"Environmental Informatics for Healthy Change" Indiana University, School of Informatics, Computing & Engineering in Bloomington, IN. February 2017

"Urban Agriculture and the Local Climate: Investigating the Potential of an Unexplored Urban Heat Island Mitigation Strategy" Clemson University, City and Regional Planning Program in Clemson, SC. April 2016

"Exploring Urban Agriculture as a Climate Change Mitigation Strategy at the Neighborhood Scale" University of Maryland, School of Architecture, Planning and Preservation in College Park, MD. March 2016

"Exploring Urban Agriculture as a Climate Change Mitigation Strategy at the Neighborhood Scale" University of Pennsylvania PennDesign, Department of City and Regional Planning in Philadelphia, PA. December 2015

CONFERENCE, WORKSHOP & PANEL PRESENTATIONS

"Beat the Heat: Engaging Communities to Better Plan and Prepare for Extreme Heat." Association of Collegiate Schools of Planning in Toronto, Ontario. November 2022 [lead author]

"Identifying Local Climate Zones in US Midwestern Cities: A Comparison of Methods." Association of Collegiate Schools of Planning". (Virtual) October 2021 [lead author]

"The Role of Green Infrastructure on Local Building Energy" American Association of Geographers, Virtual. April 2021. Samantha Hamlin, Dana Habeeb [Advisor]

"Urban Forest Equity: An Analysis of the Distribution of Edible Tress in Indiana" American Association of Geographers, Virtual. April 2021. Erin Hardman, Ava Hartman, Samantha Hamlin, Dana Habeeb [Advisor]

"Green Infrastructure and Building Energy Prediction." Association of Collegiate Schools of Planning in Toronto, Ontario (Virtual). November 2020 [lead author]

"Urban Heat Waves: A climate change indicator and the importance of minimum temperatures." Association of Collegiate Schools of Planning in Greenville, SC. October 2019 [lead author]

"Green Cities: Resilient Communities" Workshop for the American Communities Garden Associations (ACGA) in Indianapolis, IN. September 13, 2019 [co-presenter]

"Exploring the Cooling Potential of Urban Agriculture During Extreme Heat Conditions" Association of Collegiate Schools of Planning in Buffalo, NY. October 27, 2018 [lead author]

"Investigating the Impact of Urban Form and Urban Agriculture on Local Climate" at Association of Collegiate Schools of Planning in Denver, CO. October 14, 2017 [lead author]

"Urban Agriculture and the Local Climate: Investigating the Potential of an Unexplored Urban Heat Island Mitigation Strategy" at Association of Collegiate Schools of Planning in Houston, TX. October 24, 2015 [lead author]

"Exploring Urban Agriculture as a Local Climate Change Mitigation Strategy at the Neighborhood Scale" at Association of Collegiate Schools of Planning in Philadelphia, PA. October 30, 2014 [lead author]

"Avoided heat-related mortality through climate adaptation strategies in Atlanta, Philadelphia, and Phoenix" at Associations of Collegiate Schools of Planning in Philadelphia, PA October 30, 2014 [contributing author]

"Managing climate change in cities: Will climate action plans work?" at the American Planning Association conference in Atlanta, Georgia. April 27, 2014 [lead author]

"Three feet high and rising: An examination of the likely effects and potential responses to sea level rise in coastal Georgia" at the Association of Collegiate Schools of Planning in Dublin, Ireland. July 19, 2013 [lead author].

"Exploring Urban Agriculture as a Local Climate Change Mitigation Strategy at the Neighborhood Scale" at the Association of Collegiate Schools of Planning in Dublin, Ireland. July 17, 2013 [lead author].

"Hot Cities: Are cities becoming more vulnerable to extreme heat?" at 53rd Annual Meeting of The Association of Collegiate Schools of Planning in Cincinnati, OH. November 1, 2012 [lead author].

"Hot Town, Unhealthy Summer in the City: Heat, Ozone, and Urban Sprawl" at Annual Meeting of the Association of American Geographers in New York City, NY. February 25, 2012 [contributing author].

"Assessing Heat Wave Vulnerability Of Us. Cities" at 52nd Annual Meeting of The Association of Collegiate Schools of Planning in Salt Lake City, UT. October 15, 2011 [lead author].

"Managing Climate Change In Cities: Will Climate Action Plans Work?" at 52nd Annual Meeting of The Association of Collegiate Schools of Planning in Salt Lake City, UT. October 15, 2011 [contributing author].

"Do Residents Of Sprawling U.S. Metropolitan Areas Experience Greater Heat- And Air Pollution-Related Mortality?" at Meeting of The International Society for Environmental Epidemiology in Barcelona, Spain. September 13, 2011 [contributing author].

"Assessing the influence of urban form on climate change- induced health factors" at 51st Annual Meeting of The Association of Collegiate Schools of Planning Annual Conference in Minneapolis, MN. October 8, 2010 [lead author].

CONFERENCE POSTERS

"Mapping Green Infrastructure in Bloomington, IN: A Mobile Application Visualization along Kirkwood Avenue" at International Association for Society and Natural Resources (IASNR), virtual. July 17, 2020. Erin Hardma, Lily Yeagley, Samantha Hamlin, Dana Habeeb

"Local Climate Zone Classification of Central Indianapolis, Indiana" at American Association for Geographers Conference. November, 13, 2020. Bikalpa Adhikari, Jeff Wilson, Dana Habeeb, April Bryne.

"Urban agriculture and community resilience: A spatial analysis of accessibility to urban agriculture in Indianapolis, Indiana" at American Association for Geographers Conference. April, 2019 Bhuwan Thapa, Jeffrey Wilson, Heather Reynolds, Aniruddha Banerjee, Samantha Hamlin, Erin Hatch, Dana Habeeb, Abigail Sullivan

TEACHING

HCI/d Capstone: I-694 **Fall 2020, 2021, 2022; Spring 2022**

The Capstone course represents the conclusion of the HCI/d professional Master's program. In it, students pursue their own independent project, scaffolded by the course. The Capstone project is each student's opportunity to show—themselves, their peers, and potential employers—what they are capable of, both in conception and in execution.

Introduction to Health Informatics, Fall 2019: I407/H407/I507 **Fall 2019**
Indiana University

A combined advanced undergraduate and graduate course that provides an introduction to health informatics presenting an overview of challenges and opportunities and examines current and emerging interdisciplinary research in health informatics.

Smart Cities: Building Healthy Sustainable Communities: I400/I590 **Spr2018, 2020, 2021**
Indiana University

Cross listed undergraduate/graduate course that analyzes how cities currently operate, investigates how smart technologies are being implemented in cities, and identifies opportunities to improve cities through the design of future systems and applications. The course explores how we can design cities in the future to leverage information and data in order to create smarter, more connected, and healthier communities.

Environmental Informatics: I400/I590 **Spr2018, F2018, F2019**
Indiana University

Awards: Outstanding Undergraduate Project Finalist: SICE Spring 2018 Projects and Research Symposium. *Urban Jungle - Implementing green roofs on bus stops to combat the urban heat island effect and air pollution in urban areas.* Students: Theodora Emily Wattimena, Sherina Espinoza Zarate, Andrew Tran, Justin Goodman.

Undergraduate class integrating the disciplines of environmental informatics, environmental science, and urban policy to explore ways of leveraging information and communication technologies to design connected, healthy and sustainable communities with the goal of making cities and citizens more resilient to environmental challenges.

City Planning Studio: CP 6052 **Fall 2013**
Tracking the Effects of Sea Level in Georgia's Coastal Communities
Georgia Tech, Co-Instructor

Awards: American Institute of Certified Planners *2014 Student Project Award*
Georgia Planning Association *2013 Outstanding Student Project Award*
Florida Academy of Sciences *2013 Student Paper Award*

Co-instructed graduate level studio focused on sea level rise on the Georgia Coast. The studio quantified the overall impact of projected sea level rise on human and physical geographies along the Georgia Coast with a strong emphasis on social vulnerability

Campbell, G., Clermont, M., Colberg, K., Gosman, R., Harkness, A., Moore A., Lorenc, P., Nguyen, D., Yun, J., Zhou, J. (2012). "Tracking the Effects of Sea Level Rise in Georgia's Coastal Communities" Georgia Institute of Technology https://smartech.gatech.edu/bitstream/handle/1853/48711/SLR_Studio_Final.pdf

Urban Environmental Planning & Design: CP 6213 **Spring 2012, 2013, 2014, 2015**
Georgia Tech, Instructor of Record

Graduate level class on ecosystem function, environmental policy and design. Designed and led technical labs analyzing environmental impacts in cities using both GIS and remote sensing data, with strong focus on map design and aesthetics.

Urban Design Digital Media/Visualization for Planners: CP 8881 **Fall 2015**
Georgia Tech, Instructor of Record,

A graduate digital media class focused on representing ideas graphically and communicating them effectively using multiple software platforms.

Land Use and Transportation Interactions CP 6331 **Spring 2011**
Georgia Tech, Teaching Assistant

Instructed graduate students of planning, civil engineering and transportation studies in a series of database-focused lab assignments. Presented lab lectures on the Introduction to Statistical Methods, Microsoft Excel, Microsoft Access. Graded all laboratory assignments.

Planning Theory and History CP 6012 **Fall 2010, 2013**
Georgia Tech, Teaching Assistant

Graded exams on the history and the theory of city planning. Coordinated and planned a weekend fieldtrip to Charleston, SC, and Chattanooga, TN. Developed and coordinated the itinerary including a tour of the city, a series of lectures with senior planning officials including the Mayor, and a group dinner. Planned and designed a 1-day historic tour of Atlanta, GA. Created educational material to support the tour including a movie of historical locations, information packets, and maps.

Modern Architecture and the Modern City **Summer 2007**
Georgia Tech, Teaching Assistant

Teaching Assistant for the *Modern Architecture and the Modern City* summer study abroad program**.** Helped coordinate international lectures, tours, and schedules in the Netherlands and Finland**.** Designed, implemented, and managed class wiki for program coordination

Invited Lecturer/Design Juror
Indiana University

Sept 1, 2022 Intro to Health Informatics: *Environmental Informatics, Health & Climate*
Sept 7, 2021 Intro to Health Informatics: *Environmental Informatics, Health & Climate*
Aug 24, 2020 Intro to Informatics: Informatics in Practice: Internet of Things
Sept 9, 2020 Intro to Health Informatics: *Resiliency: Planning for Climate Change*
Feb 20, 2018 Field Deployments: *Extreme Heat Monitoring*
Oct 30, 2018 Animal Computer Interaction Seminar: *Green Infrastructure Strategies*
Oct 10, 2018 Intro to Health Informatics: *Resiliency: Planning for Climate Change*

Georgia Tech

Apr 26, 2016 Juror for the Mike Rice Award studio : *Sapelo Island Marine Institute*
Apr 17, 2014 Intro to Urban and Regional Planning: *Climate Change & Sea Level Rise*
Dec 02, 2014 Environmental Policy: *Environmental Justice & the Chattanooga Way*
Dec 04, 2014 Environmental Policy: *Environmental Justice & the Chattanooga Way*
Dec 05, 2013 Urban Design Studio Juror: *Sea Level Rise Design Strategies*
Nov 08, 2013 Theory and History of Planning: *Atlanta Historic Tour*
Oct 24, 2013 Theory and History of Planning: *For whom do we Plan? Model City Case Study*
Oct 17, 2013 Theory and History of Planning: *Incrementalism and Bounded Rationality*
Nov 20, 2012 Public Health and Built Environment: *Adaptation to Climate Change*
Jan 27, 2012 Urban Design Studio: *Design Problems and Opportunities in Urban Agriculture*
Nov 18, 2011 History and Urban Theory: *Tour of Historic Oakland Cemetery*
Nov 30, 2010 Introduction to Planning: *Subdivisions of American Neighborhoods*
Aug 26, 2010 History and Urban Theory: *Theories of Urbanization and Early Planning*
Nov 20, 2009 History and Urban Theory: *Atlanta Historic Tour*

MENTORING

Post Doc.

Aug 2019- 2022 Samantha Hamlin, Indiana University

Ph.D. Student Advising

Jan 2020 – Present Jimmy McDonnel, Indiana University, Public Health
Minor Adviser
May 2020 – Jan 2021 Jeremy Park, IU, Indiana University, Informatics
Primary Adviser

Ph.D. Student Research Projects

Aug 2018 – 2019 Abiola Lawal, Georgia Institute of Technology
Civil & Environmental Engineering
May 2019 – 2021 Arash Zakeresfahani, Indiana University, Informatics
Jan 2020 – 2021 Alexander Hayes, Indiana University, Informatics

Masters Students

Jan 2020 – 2021	April Byrne, Indiana University, SPEA
Aug 2020- 2021	Luke Fabina, Indiana University, SPEA
May 2021 – Aug 2021	Gabrielle Cantor, Indiana University, Intelligent Systems Engineering
May 2021- July 2022	Shawn Miya, Indiana University, Public Health
May 2021- Dec 2021	Zach Richardson, SPEA
Jan 2022 – Present	Rahul Devajji, Data Science
Jan 2022 – Present	Lavanya Subramanian, HCI/d
May 2022- Aug 2022	VarshaVarma, Data Science
May 2022 – Aug 2022	Uday Sharaff, Data Science

Undergraduate Students

May 2018 – August 2018	Susan Monsey- IU REU student **Award:** 2018 First Place Poster Award at OurCS/Hello Research poster competition – a research-oriented workshop for undergraduate women to increase the participation of women in computing-related research careers. *Monitoring Heat Stress Through Environmental Sensing.*
May 2018 – Aug 2018	Kiarra Patchett, IU REU student
July 2018 – 2019	Danny Vu, Senior Internship , *IU Environmental Sensor Network- Database creation and environmental data visualization*
Aug 2018 – Dec 2018	Genevieve Zircher, CEWiT Environmental Science Freshman
Aug 2018 – Dec 2018	Celeste Coughlin, CEWiT SPEA Sophomore
Dec 2018 – May 2019	Andy Zheng
Jan. 2019 – May 2019	Clara Fridman, Independent Study **Award:**2019 CogSci Outstanding Contribution Award
Aug 2019 – May 2020	Lily Yeagley, CEWiT
Aug 2019 – Present	Erin Hardman, CEWiT **Award:** IU REU 2021 Summer Grant Awardee
Jan 2020 – Present	Zebulon Holtz, Informatics, Senior Internship, Research Assistant
Jan 2020 – July 2020	Conor Nolan
May 2020 – Aug 2020	Luke Fabina

May 2020 – Aug 2020	Gerardo Munoz, Louis Stokes Alliance for Minority Participation (LSAMP) program
Aug 2020- Aug 2021	Ava Hartman, CEWiT **Award:** 2nd Place CEWiT Poster Presentation **https://iu.mediaspace.kaltura.com/media/t/1_unqvs66e** **Award:** IU REU 2021 Summer Grant Awardee
May 2021- Aug 2021	Jules Wood, SPEA
May 2021 – Present	Hallie Schmucker, Informatics, NSF REU Student
May 2021 – Present	Greatzel Unabia, NSF REU Student, Georgia Gwinnett College
May 2021 – Present	Oscar Urbina, NSF REU Student
January 2022 -Present	Liv Davis, IU Geography, Research Assistant Honor Thesis Co-advisor: *Beyond the Fire Line: A Community Health Vulnerability Index and Analysis of Post-Fire Recovery in Santa Cruz County, California*
May 2021 – Aug 2021	Nihar Sunil, IIT-Bombay IU Global Talent Atrraction Program (GTAP)
Aug 2022 – Present	Isabella Harper , Sustainability Scholar
Aug 2022 – Present	Nick Polack, Sustainability Scholar

ACADEMIC SERVICE

2022 – Present	Informatics Department Policy Committee Member
2022 – Present	Informatics Outreach Committee Member
2022 – Present	Reviewer, ACM SIGCHI Conference on Human Factors in Computing System (CHI)
2021-2022	Department of Informatics HCI/d Junior Faculty Search Committee Member (2)
2021-2022	Department of Informatics HCI/d Senior Faculty Search Committee Member
2021	National Science Foundation (NSF) S&CC Panelist
2021	National Science Foundation (NSF) FW-HTF Reviewer
2021	Journal Peer Reviewer, AGU
2019	Reviewer, ACM Designing Interactive Systems
2019-2020	Heat Expert Panelist for the Hoosier Resilience Index

2019	Tenure track faculty panelist for IU's new faculty orientation hosted by CITL "What I Wish I had Known as First-Year Faculty Member"
2019	Internal IU grant proposal reviewer PfEC
2018- 2022	Informatics Undergraduate Curriculum Committee Member
2017-Present	Journal Peer Reviewer, Landscape and Urban Planner
2017-Present	Journal Peer Reviewer, Climatic Change
2017-Present	Journal Peer Reviewer, Urban Climate
Fall 2015	Coordinated an Interdisciplinary Vertical Agriculture Design workshop hosted with Georgia Tech, City of Atlanta, Perkins + Will, and Blue Planet.
2012-2017	College of Architecture NSF Advance program member
2010-2014	SCaRP Ph.D. student representative at faculty meetings
2010-2013	SCaRP Ph.D. Social Chair
2007-2008	College of Architecture Urban Design Faculty Search Committee: Student Representative

SELECTED PRESS/MEDIA COVERAGE

Thiele, R. (2022, Aug 9). Clarksville, Richmond develop plans to protect residents from extreme heat. NPR WFYI. Retrieved from https://www.wfyi.org/news/articles/clarksville-richmond-develop-plans-to-protect-residents-from-extreme-heat

Vilfranc, C. (2021, Aug. 27). As climate change makes Indianapolis hotter, some communities will suffer more than others. Indy Star. Retreived from https://www.indystar.com/story/news/environment/2021/08/27/indianapolis-weather-extreme-heat-caused-climate-change-hits-hard/8208625002/?utm_campaign=snd-autopilot&fbclid=IwAR3A0NkqpWQyXaIp9K_juJ_OPAGGZi-_R1nUm8ptBVuTyI7UlKc7Swf3ZTE

Vilfranc, C. (2021, July 30). 'Hotter and more humid': Dangerous extreme heat will impact Indiana in coming years. Indy Star. Retrieved from: https://www.indystar.com/story/news/environment/2021/07/30/indiana-weather-extreme-heat-put-more-hoosiers-health-risk/8074218002/?utm_source=feedblitz&utm_medium=FeedBlitzRss&utm_campaign=indystar/allnews

Kugler, C. (2021, July 13). IU researchers developed a program that maps cities' green spaces, infrastructure. The Herald Times. Retrieved from https://www.heraldtimesonline.com/story/news/local/2021/07/13/iu-researchers-develop-program-indiana-green-city-mapper-environmental-resilience-institute/7914166002/

Rickert, A. (2021, June 18). Clarksville gets $171K grant to mitigate risks of extreme heat. News and Tribune. Retrieved from https://www.newsandtribune.com/news/clark_county/clarksville-gets-171k-grant-to-mitigate-risks-of-extreme-heat/article_8a09a4d6-d05b-11eb-b573-b381a8fcec9f.html

Earls, M. (2020, Jun 17) Summer Heat Waves Threaten Those Most at Risk From Covid. Bloomberg Law. Retrieved from https://news.bloomberglaw.com/environment-and-energy/summer-heat-waves-further-threaten-those-most-at-risk-from-covid

Thiele, R (2021, June 17). Richmond, Clarksville Work With IU To Study How To Combat Extreme Heat In Their Cities. Indiana Public Radio. Retrieved from https://indianapublicradio.org/news/2021/06/richmond-clarksville-work-with-iu-to-study-how-to-combat-extreme-heat-in-their-cities/

Wilson, M. (2021, April 2016). Feeling hot? Evansville, urban residents could be feeling the heat more than others. Courier Press. Retrieved from https://www.courierpress.com/story/news/local/2021/08/16/evansville-weather-indiana-urban-areas-feel-heat-even-more-climate-central-report/5552114001/

(2021, March 16). Beat the Heat program now accepting applications. Indiana Environmental Reporter. Retrieved from https://www.indianaenvironmentalreporter.org

(2021, March 2). OCRA announces partnership with Indiana University to provide Beat the Heat program. Retrieved from https://events.in.gov/

(2018, Oct 18). US Heat Waves in new Interagency Indicator. National Oceanic and Atmospheric Administration. Retrieved from https:/www.noaa.gov

Plumer, B. (2018, July 24). 5 Ways to Keep Cities Cooler During Heat Waves. The New York Times. Retrieved from https:/www.nytimes.com

Habeeb, D. (Host). (2017, November 16). Daily Local News[Radio program]. In N. Glab (Producer), *Big Talk! W/ Michael Glab*. Bloomington, IN: WFHB.

PROFESSIONAL EXPERIENCE

Georgia Tech Research Assistant: **2015- 2018**
School of Civil & Environmental Engineering, Atlanta, GA

Contributing my urban agriculture research towards a National Science Foundation (NSF) Sustainable Research (SRN) grant titled SRN: Integrated Urban Infrastructure Solutions for Environmentally Sustainable, Healthy, and Livable Cities. Investigating the potential of urban agriculture to act as green infrastructure. Exploring the role that distributed infrastructure can play in making cities more resilient. Investigating how the built environment impacts a person's wellbeing through the deployment of low cost environmental sensors and mobile phones.

Georgia Tech Research Assistant: **2009- 2017**
School of City and Regional Planning, Atlanta, GA

Conduct research centered around climate change, design and health. Focused on two CDC funded research projects that investigated the correlations between the built environment, climate change and human health effects. Investigated the impact of climate responsive design techniques on the urban climate. Constructed and analyzed databases for ozone, $PM_{2.5}$, extreme heat events, heat waves, land cover change, climate action plans, and plant

hardiness zones. Designed, built, and maintained the web presence for the Urban Climate Lab –www.urbanclimatelab.gatech.edu

Georgia Conservancy **05/2012**
Consultant/Environmental Planner, Atlanta, GA

Co-authored a report examining the impact of sea level rise on the Georgia coast. The report focused on social vulnerability, coastal hazards, and the demographics of the Georgia Coast.

Etienne, Harley and Habeeb, Dana (2012) Georgia Coastal Vulnerability: a proposal for the study of social vulnerability in Chatham, Liberty and McIntosh Counties, The Georgia Conservancy.

CRB Realty **2008-2009**
City Planner/Urban Designer, Atlanta, GA

Developed a high-level economic analysis plan for Houston County, Georgia**.** Worked with state, county, and city officials as well as with community leaders to develop a long-term county vision encompassing a green energy plan, the design of a countywide nature corridor, and a plan to develop the existing aerospace industry into a public-private enterprise.

CUH2A Inc. **2002-2008**
Lab Planner, Intern Architect, Atlanta, GA

Lab Planner in the world's largest science and technology (S+T) design firm. Specialized in infectious disease laboratories and insectaries and also worked on higher educational laboratories for top tier universities. Part of a team of two responsible for the programming and schematic design phase of over 100,000 sq. ft. of high containment laboratory space for a CDC project worth >$300 million. One of six individuals who spearheaded the firm's transition to Graphisoft's Building Information Management (BIM) software by leading the company's first BIM project. Coordinated back-office work within project teams to generate, organize, maintain and manage project schedules on projects totaling > $300 million in the role of construction administrator.

PUBLIC SERVICE

Cabbagetown Initiative Community Development Corporation (CICDC) **2008-2013**
Elected Board Member, Atlanta, GA

Active board member of a community development corporation responsible for raising and distributing money for neighborhood maintenance and revitalization. Responsible for coordinating projects with district representatives, the city of Atlanta, business owners and residents which include a community garden, neighborhood composting, and land acquisition. Founded and led the design, construction, and on-going community development of the Cabbagetown Community Garden. Worked with City Council and Park Pride Inc. to pass city legislation to allow for the creation of the first community garden constructed on public land outside of a park. Wrote, received, and administered grants totaling over $5000 from Park Pride Inc. and Home Depot for the construction and maintenance of the Cabbagetown Community Garden. Committee member who organizes and runs Cabbagetown's neighborhood festival: Chomp and Stomp. Over

20,000 people attend the festival, which raises the primary operating funds for CICDC which contributes to park maintenance, green space creation, and community services.

Cabbagetown Neighborhood Association **2008-2010**
Traffic Committee Chair, Atlanta, GA

Responsible for coordinating traffic/street plans and designs with district representatives, the city of Atlanta, business owners and residents.