

Anna Grace WHITE

PERSONAL DATA

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EDUCATION

University of Michigan , Ann Arbor, Michigan PhD Pre-Candidate in INDUSTRIAL AND OPERATIONS ENGINEERING Advisor: Seth Guikema, PhD <i>Science, Technology, & Public Policy Certificate Program</i> GPA: 4.04/4.00	MAY 2022 (Expected)
Clemson University , Clemson, South Carolina Bachelor of Science in INDUSTRIAL ENGINEERING Calhoun Honors College: General and Departmental Honors <i>Minor in Modern Languages - Spanish</i> GPA: 4.00/4.00 (<i>Summa Cum Laude</i>)	MAY 2017
Universitat Autònoma de Barcelona , Barcelona, Spain Semester Study Abroad	SPRING 2015

ONGOING RESEARCH

Persistent Patterns of Discriminatory Housing Policy and Inequity: A Spatial Analysis
Submitted for publication

Racial discrimination by housing and lending institutions was legal and widely practiced well into the 1960s in the United States. Although such discrimination is now illegal, the scars of this system persist today in the form of highly segregated urban areas and pockets of inequality across cities. In this study, we compare spatial patterns between discriminatory lending maps drawn by the Home Owner's Loan Corporation (HOLC) and 12 current quality of life indicators including health, employment, education, and income. We use statistical analysis tools and unsupervised learning techniques to explore the connections between HOLC evaluations and today's outcomes over 14 wide-ranging cities. While existing literature focuses on case studies of particular cities and outcomes, we take a broad view and find consistent relationships over our study's cities and variables with few exceptions. These relationships suggest that discriminatory housing patterns continue to be reflected in outcomes in cities today.

SELECTED AWARDS

National Defense Science and Engineering Graduate Fellowship Finalist	2018
Rackham Merit Fellow	2017
Michigan Institute for Computational Discovery and Engineering Fellow	2017
Clemson University Faculty Scholarship Award	2017
Dixon Global Policy Scholar	2013

AFFILIATIONS: CURRENT

Institute for Operations Research and Management Sciences (INFORMS) <i>Outreach Committee Co-chair, University of Michigan Chapter (Appointed)</i>	JAN 2018 -
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INDUSTRY EXPERIENCE

Draexlmaier Automotive of America , Duncan, South Carolina <i>Corporate Logistics Intern</i> Worked as a Material Flow Planner to update 40 bay Marketplace and 10 Tugger routes in preparation for building expansion for new carline launch. Facilitated Kaizen event among four departments to clarify and improve machine leasing protocol. Verified, maintained, and created a total of four logistics databases to ensure all planning information was correct in systems and matched information available in plant.	SUMMER 2016
BorgWarner Turbo Systems , Asheville, North Carolina <i>Supplier Quality Intern</i> Verified incoming prototype materials were to specification by reviewing supplier submissions; resolved missing and deficient submissions concerns. Provided launch support on new customer program through packaging verification and leveling verifications; manufacturing readiness preparation. Became skilled with new computer systems (SAP, eQLR, EMS) and developed instructions for their use. Participated in supplier visits and audits to develop an understanding of manufacturing and quality processes.	SUMMER 2015
Biltmore Estate Winery , Asheville, North Carolina <i>Tasting room wine server</i>	SUMMER 2014

TEACHING EXPERIENCE

Seneca High School , Seneca, South Carolina <i>TigersTeach Intern</i> Assisted instruction in three Algebra I sections and one Pre-Calculus section. Explored teaching methods and teaching career on a weekly basis with a collaborating teacher.	FALL 2015
T.C. Roberson High School , Asheville, North Carolina <i>After-school Peer Tutoring Program Founder</i> Started an after-school tutoring program to facilitate peer-to-peer tutoring in math courses.	FALL 2012 – SPRING 2013

OUTREACH AND MENTORSHIP

MENTOR:	SWE Michigan Student Chapter (undergraduate student), INFORMS Michigan Student Chapter (graduate student), Lunch & Lab with a Graduate Student (undergraduate students)
VOLUNTEER:	Dawn Farm Addiction Treatment Center, GISE (Girls in Science and Engineering) Summer Camp, Xplore Engineering Summer Camp, FEMMES (Females Excelling More in Math, Engineering, and the Sciences)

CONFERENCE PRESENTATIONS

White, A. G.*, Guikema, S., Logan, T. "Persistent patterns of discriminatory housing policy and inequity: a spatial analysis" <i>INFORMS Annual Meeting</i> , Phoenix, Arizona.	NOV 2018
White, A. G.*, Guikema, S., Logan, T. "Persistent patterns of discriminatory housing policy and inequity: a spatial analysis" <i>International Conference on Transport and Health 2018</i> , Mackinac Island, Michigan.	MAY 2018
White, A. G.*, Guikema, S., Logan, T. "Persistent patterns of discriminatory housing policy and inequity: a spatial analysis" <i>Michigan University-Wide Sustainability and Environment (MUSE) Annual Conference</i> , Ann Arbor, Michigan.	FEB. 2018
Farthing, A.*, Harris, N., Riggs, R., Mason, S., White, A. G. "Cost minimization and fleet sizing for multifunction electric bus fleets" <i>INFORMS Annual Meeting</i> , Nashville, Tennessee. <i>Presenting author indicated with *</i>	NOV. 2016

SKILLS

PROFICIENT:	R, VBA, ArcGIS, AMPL, LaTeX, AutoCAD, Solidworks Mechanical Design, Microsoft Office
INTERMEDIATE:	MATLAB, Arena Simulation Software, SAP
BASIC:	Python, Wolfram Mathematica, CPLEX Solver, Gurobi Solver, Minitab Statistical Software

PROFESSIONAL SERVICE

REVIEWER: *Journal of Risk Analysis*

LANGUAGES

Spanish (6 years) –
Reading, Writing, Comprehension: *Proficient*,
Speaking: *Intermediate*

AFFILIATIONS: PAST

University of Michigan Central Student Government <i>Rackham Graduate School Representative (Elected)</i>	FEB 2018 – NOV 2018
Dixon Global Policy Scholar Studied European identity and policy-making as one of 12 selected students in a 12-day study abroad program through Belgium, Luxembourg, France, Germany, and Switzerland. Continued policy studies through two courses and bi-weekly peer discussion groups, culminating in a policy proposal document for a topic of our choosing.	SPRING 2014 – SPRING 2017

Clemson University Student Government: Sustainability Committee
Sustainable Education Programs Chair

Led subcommittee to plan and carry out sustainability education events with local elementary and high schools.

Organized and supported initiatives like Earth Day, Sustainability Week, Student Sustainability Initiative, "Zero-waste" events, and education programs on campus.

Promoted sustainable organizations and events on campus and in the community.

FALL 2013 –
SPRING 2017

Clemson University Women's Rowing Team

Balanced academics and six days of strenuous training per week.

Competed in all home regattas.

FALL 2013 –
SPRING 2014