

Veronica White

Google Scholar: [user=E-D8maUAAAAJ&hl=en](https://scholar.google.com/citations?user=E-D8maUAAAAJ&hl=en) • Personal Website: <https://vmwhite.github.io/>

STATEMENT OF PURPOSE

I am a Ph.D. candidate in Industrial and Systems Engineering at UW-Madison. My focus area is operations research with an emphasis on program evaluation (causal inference, statistical tests), optimization (i.e., mathematically modeling strategic thinking), simulation (discrete event), and implementation science. I worked on improving and being a technical interpreter for downstream stakeholders of the large-scale mixed integer multi-stage optimization Amazon Devices Supply Chain model through my internship at Amazon, Inc. I additionally have experience writing technical reports and delivering technical ideas to a variety of practitioners and scientists through the NIJ RAP. In the future, I want to work on models that positively impact our society.

EDUCATION

University of Wisconsin – Madison

Anticipated Graduation: May 2024

Doctor of Philosophy, Industrial Engineering, Operations Research Focus

Master of Science, Industrial Engineering, Operations Research Focus

Spring 2019

Iowa State University of Science & Technology BS – Ames, IA

Bachelor of Science, Industrial Engineering

Magna cum Laude 2017

RESEARCH EXPERIENCE

Policing and Opioid Use Disorder – Research Assistant

Oct. 2018 to Present

UW Industrial and Systems Engineering – Dr. Albert & Dr. Zayas-Cabán

- Study Overview: NSF funding for analysis of a smart policing initiative, which will be used for optimization models in illicit drug interdiction and police scheduling
- Creating graphs and simple statistical analysis done with RStudio
- Developed causal inference methods to evaluate 6-month recidivism outcomes
- Developing DES simulation to model county-level impacts of various policies
- Future work: Optimizing police and mental health 988 dispatching using Python

Criminal Justice Research – Research Assistant Program

Oct. 2020 to Mar. 2023

National Institute of Justice

- Developed two NIJ solicitations and part of another solicitation's grant review process
- Added to two NIJ research portfolios on hot-spot mapping metrics and mass shootings
- Enhanced Office of Justice Program's human subjects IRB approval process
- Organized April 2021 Forensic Intelligence Workshop for over 50 federal partners
- Enhanced the data collection and analyses of the Eastern District of Wisconsin's Re-entry program

Iowa e-Health Project – Research Assistant

Oct. 2018 to Aug. 2020

Center for Health and Systems Studies (CHESS) – Dr. Gustafson & Dr. Molfenter

- Study Overview: RCT test implementation strategy for an addiction-based recovery mobile application
- Worked with Iowa Department of Public Health to obtain de-identified data for the study
- Planned and developed study protocol execution for training 11 addiction treatment organizations

Stochastic Ambulance Dispatching Modeling – Research Assistant

May 2018 to Jul. 2020

UW Industrial and Systems Engineering – Dr. Albert

- Completed and summarized computational results using Python for a stochastic optimization model

Graduate Research Assistant

Sep. 2017 to May 2017

University of Wisconsin-Madison – Dr. Jingshan Li & Dr. Philip Bain MD

- Presented initial findings to stakeholders (e.g., SSM health, African American Opioid Coalition of Dane County, Safe Communities)
- Managed and cleaned database of 250+ orthopedic patients
- Built logistic regression model and visualizations in Python

INDUSTRY EXPERIENCE

- Amazon – DIAL OR Scientist Intern**, Virtual, Seattle, WA Summer 2020
- Created a new solver that separated the final optimization model from the primary Amazon Devices Solver, allowing it to be solved separately and repeatedly
 - Communicated and documented the new solver's purpose and logic to various stakeholders (e.g., DIAL team, demand planning team, contractors in the supply chain)
- Corporate Quality Engineering Intern**, *Shure Incorporated – Niles, IL* Summer 2016 & Summer 2017
- Utilized Minitab to analyze a destructive gauge R&R, Salt-fog study using ANOVA, etc.
 - Used hypothesis & accelerated-life testing to evaluate new product reliability
- Safety and Ergonomic Intern**, *Lennox Industries Inc. – Marshalltown, IA* Jan. 2015 to Aug. 2015

ADDITIONAL PRESENTATION AND MENTORING EXPERIENCE

- Teaching Assistant:** Created and facilitated weekly discussion sections
- I SY E 323 – Operations Research: Deterministic Modeling Spring 2018, Fall 2018
 - I SY E 313 – Engineering Economic Analysis Fall 2017, Summer 2018
- Guest Lecturing:**
- Introduction to Optimization – 75 min ~ 60 students June 17th & 19th, 2019
 - Operations Research: Deterministic Modeling – 75 min ~ 65 students, Nov. 6 & Apr. 26, 2018
- Tutor:** Worked with five groups of 3-6 students. Each group met bi-weekly.
- Statistics 231 – Introduction to Statistical Concepts & Methods Fall 2016, Spring 2017
 - Physics 222 – Introduction to Classical Physics 2 Fall 2016, Spring 2017
- Research Mentoring - Undergraduates**
- Colleen Wall – “Time-Series Modeling of Opioid Related Hospital Encounters”, Jun. to Dec. 2021
 ❖ Awarded 3rd in OR/MS Tomorrow 2021 Mini-Poster Competition
 - Meghan Meredith, “Literature Review and Analyses of a Community Policing Initiative”, 2018 to 2020
 - Praan Pisitthakarn, “VBA Graphs for an Addiction Treatment Mobile Application”, Jan. to May 2019

SELECTED SERVICE

- Committee Member** of Graduate Student Advisory Committee (GSAC) Nov. 2020 to Present
College of Engineering – University of Wisconsin Madison
- Grant Reviewer**, Chapter Development Fund, *National Science Policy Network* Summer 2021
- Vice President**, INFORMS UW-Madison May 2019 to Apr. 2020
 ❖ *INFORMS 2020 Student Chapter Annual Award at the Cum laude level*
- Pi Mile Run Co-Coordinator**, Tau Beta Pi Wisconsin Alpha Oct. 2018 to Apr. 2019
- Organized, fundraised, and secured permits and venue for local 5k/10k that hosted 100 runners and raised over \$2,000 for Occupaws Guide Dog Association

RECENT HONORS AND AWARDS

- DAS/SDP Decision Analysis Practice Award, Finalist Fall 2022
- INFORMS DEI Ambassador Spring 2022 & Spring 2023
- IISE Future Faculty Fellows (3F) Program Spring 2022
- National Institute of Justice Research Assistant Program Fellowship Fall 2020 & Fall 2021

LANGUAGES, SOFTWARE, AND PROGRAMMING SKILLS (*working knowledge)

Swedish*	Julia	Java*	STATA	ArcGIS	Arena	HTML/CSS
Python	R	Matlab*	VBA	Minitab	SQL*	JavaScript*