



Karen Bonilla, PhD

PhD in Data Science

Why did you choose to study at WPI?

The first time I heard of WPI was in my sophomore year of undergrad while participating in WPI's summer Data Science [Research Experience for Undergraduates](#) (REU) program. I was assigned to a group led by my current research advisor, Professor Lane Harrison. After the summer, I stayed on, part-time, to continue [researching](#) with the group. In the meantime, I graduated from my bachelor's program and, after working for four years, realized that I enjoyed the research work more than my full-time job. I decided to pursue a PhD in [Data Science](#) at WPI to focus on research while also building the necessary academic foundation through taking classes as part of the program.

How are you involved with the WPI community?

Through people I met during orientation, I joined two clubs for graduate students. The [Graduate Research Organization for Womxn](#) is a great support group and a chance to learn the soft skills for managing the challenges as a grad student. In the Women in STEM Book Club, we read and



Hometown

Miami, FL

Mentor/Advisor

- [Lane Harrison](#)
- [Kelsey Briggs](#)
- [Elke Rundensteiner](#)

Achievements

- National Science Foundation Graduate Research Fellow 2025
- CEDAR Trainee
- Co-author of "The Risks of Ranking: Revisiting Graphical Perception to Model Individual Differences in Visualization Performance" by Russell Davis, Xiaoying Pu, Yiren Ding, Brian D. Hall, Karen Bonilla, Mi Feng, Matthew Kay, Lane Harrison

discuss non-fiction books with topics related to women in science while meeting grad students in other departments. This has encouraged me to start reading more non-fiction. I have also been a Women in Data Science (WiDS) Ambassador, helping to organize a conference and other events showcasing the latest in data science. I have also been part of WPI's Society of Martial Artists' (SOMA) boxing class this past fall and later did some of the open-mat boxing.

What's your favorite thing about WPI?

One of my favorite things about WPI is the research lab I work in and my lab mates, specifically. They're all such driven and amazing people but they also make the time to help others in the lab when they can. They've been incredibly supportive and are a big part of why I am so happy in my program and research work. Another favorite thing about WPI is the Data Science program (not offered at many other universities), which is one of the main reasons it was my first choice for a graduate school. This is more of an aside, but WPI's campus is also beautiful, and I've enjoyed seeing how it changes with the seasons, especially in the spring!

Do you have a faculty or staff mentor?

My research advisor Professor Lane Harrison has been incredibly influential to me ever since the REU. He encouraged me to apply to WPI's graduate program throughout the years we worked together and supported me when I eventually applied. I have him to thank for a lot of the steps I made towards starting my PhD. Professor Elke Rundensteiner has also been instrumental in my path to WPI as the principal investigator for the Data Science REU program and all she does to help students every day. While there are many others who have been influential along the way, Kelsey Briggs has been an absolute pleasure to work with on WiDS and I always look forward to any opportunities for collaborating with her.

- Human-Computer Interaction Research Paper Accepted to the 2018 IEEE MIT Undergraduate Research Technology Conference, following the Data Science Research Experience for Undergraduates: "Revisiting Graphical Perception of Common Data Visualizations using Bayesian Modeling" with co-author Jiehui Luo
- White House Science Fair 2015 Honored Guest

Interests

- Kickboxing
- Cooking
- Hiking
- Kayaking
- Archery
- Reading

Campus Activities

- Graduate Research Organization for Womxn
- Women in STEM Book Club
- Women in Data Science Ambassador
- Society of Martial Artists boxing class



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What projects are you working on?

Continuing with the research started in the REU, I am working in the sub-field of data visualization literacy within Human Computer Interaction (HCI). My goal is to understand why some people are skilled at reading and interpreting graphs and distill those reasons into ways of teaching others to effectively read graphs that way. While I'm just in my first year and still narrowing down what specific research I want to conduct, I'm planning to use learning sciences to inform approaches towards my research goal. Another area I would like to research (but have not yet found a way to fit it into my current plan) is circular economy, specifically food waste reduction.



7AM **8AM** **10AM** **1**

Go to Pilates class and get ready for the day	Work on a groupwork case study for my Data Science class	Help complete some pending tasks on a pilot study for an upcoming paper	L x
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