



Media Landscape (MeLa) Lab @ UTK

Working with Me

If you are interested in working with me on research, you must be interested in the type of work we do (see lab focus) and share our core values (see lab values). While the skills you already know are important, I am less concerned about the type of skills you already have and more concerned about how motivated you are to do research. You do not have to be a programmer to work in this lab. Our research utilizes computational methods, quantitative methods, qualitative methods, and survey methods. However, importantly, if you want to do a project that involves heavy programming skills, you must be able to program – as there is not enough time to teach programming and do research. I am happy to teach cool programming tricks, but I cannot take time to teach fundamentals.

There are also various logistics to keep in mind:

PhD students: I have appointments in two PhD programs which have different logistics and goals. First, I work with students within the College of Communication and Information PhD program – a college-wide that spans the four schools (Information Sciences, Journalism & Media, Communications, and Advertising & Public Relations). Students in this program come from various disciplines and typically are funded through teaching positions within the college. While I do review student applications in this program, I do not have much control over who gets in or the allocation of funding. If you are interested in working with me, mention this explicitly in your application. Second, I work with students in the Data Science and Engineering PhD program within The Bredesen Center. Students in this program must have a technical background, typically Computer Science or related. I have much more control about who gets accepted to work with me in this program, but it is completely dependent on my external funding. Some years I do have funding for a student, other years I do not. If I have funding for a student, I actively review student applications and interview students in this program. Further, the type of research students in this program would do is also dependent on the funding source. In both cases, I am limited by the number of students I can handle at one time.

Master's students: I occasionally work with students in the MSIS program within the School of Information Sciences. Often this comes in the form of independent studies for class credit. Unfortunately, I rarely have funding allocated to pay master's students to do research. Importantly, we must have a clear project and plan in mind prior to the

semester(s) of the independent study. There simply is not enough time to explore ideas and complete a project within the time frame. I have a limited capacity to work with students. This can change year to year based on various other commitments.

Undergraduate students: I often work with undergraduates across campus, most often Information Sciences majors. Just as with master's students, this often comes in the form of independent studies and must have a clear project and plan in mind prior to the semester(s) of the independent study. Again, I have a limited capacity to work with students which can change year to year based on various other commitments. Hence, if you ask to do an independent study with me and I say no, do not take it as you are a bad student (you are a good student) but as I am simply too busy to give you the time/support you deserve.

Lab Focus

In this lab, we study the production of, consumption of, and interventions to misinformation, disinformation, and malign influence in media ecosystems.

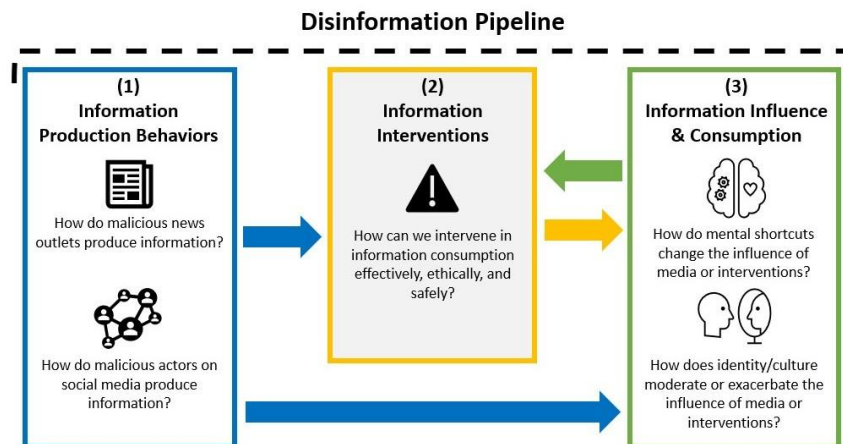


Figure 1: How media production, consumption, and interventions relate to each other.

Much of the work currently falls into three broad categories: 1. Testing the effectiveness and safety of information interventions, such as content warning labels, fact-checks, context labels, and accuracy prompts/nudges. 2. Describing media ecosystems, which can include news media, social media influencers, or the interaction between social media platforms. 3. Understanding the interactions between media consumption, cultural identity, and lived experiences on perceptions.

While, in the past, my work was heavily focused on developing ML/AI tools for misinformation detection, I am not very interested in building ML/AI pipelines anymore (see [this paper](#) or [this talk](#) if you want to know why). If you are really interested in building ML/AI

stuff, I could be persuaded if: (a) the goal is *meaningful* (see lab values below) (b) the measure of success is not to narrowly beat some arbitrary baseline, and (c) you know or plan to learn the fundamentals of machine learning (importing scikit-learn and fitting a model is not fundamental).

Lab Values

Below are some values that guide the work we do and how we do it. This values statement is in-part inspired by Kenny Joseph's - a great researcher and friend - [cUBelab values](#).

- **Engaging in *meaningful* work:** For me, meaningful work is work that promotes a well-informed society that is resistant to malign influences. This work can be done in many direct and in-direct ways, ranging from producing new knowledge about human/media behavior to building intervention methods. More importantly, this work must be done with ethics and safety in mind. This means I am not interested in selling tools/methods to people who want to make money countering disinformation or working on any project with the goal of profits or advancing corporate interests. This also means thinking critically about *what could go wrong* when doing this type of research or when deploying a certain tool.
- **Engaging in *deep* work:** If you ever take a class with me, you will likely hear a lecture on the importance of deep work. Deep work is “activities performed in a state of distraction-free concentration that push your cognitive capabilities to their limit. These efforts create a new value, improve your skill, and are hard to replicate.[1]” In other words, when you are working, do one thing at a time. Fragmented attention - whether through using social media, answering email, or working during football on Sundays - cannot accommodate deep work. By respecting your attention, you will be able to learn complex skills, produce exciting ideas, and get your work done without working too many hours.
- **Respect that work is only one part of life:** You should be sleeping, getting exercise, and building relationships outside of work. During graduate school, these important parts of life can get put on the back burner. While each person's working hours may be different, please set working hours and be disciplined about working in those hours and not working in other hours. In other words, you should be watching that football game on Sunday with your friends without working.
- **Be careful and honest:** Unfortunately, there is a lot of pressure to produce novel, ground-breaking research at lightning speeds in today's academia. However, you should take your time to think through what you are doing. You should always sanity check your work. And under no circumstances should you plagiarize or tamper with data/results to get by. It's okay to make mistakes and it's okay to have null results.

Science is supposed to be about finding truth, and sometimes the truth is our hypothesis was wrong. If you make a mistake or get stuck, let me know. Then we can find a way to move forward.

Some other principles for doing research in the lab

- **Start from the question you want to answer, not from the data/methods you have readily available:** It is tempting to start doing research with the lowest hanging fruit. For example, just exploring news data for misinformation because we have news data is not very compelling. If we want to describe a set of data, let's first ask why we should describe it (I am very pro descriptive work if well motivated). If we want to launch a survey, let's first ask what our dependent variable will be. If we start with the question and stick with the question, it is much easier to do research from start to finish. Fishing expeditions do not produce useful science and will probably take up more time. This is why I am a big fan of pre-registering studies (see aspredicted.org).
- **Know the literature:** To know a useful question, you usually must know what others have already answered. This is not to say that life experience and intuition are not useful in knowing what to ask. But academic work should engage with the work of others, and I think you will find that engagement with the literature will help you to better express and frame your thoughts, concerns, and questions.
- **Use multiple methods to answer the question:** The work done in this lab inherently crosses many disciplines, and thus so should its methods. We may do a lot of computational work, but we are not a Computer Science lab. If computational methods can't answer the question, do not be afraid to use qualitative methods or design a survey experiment. If we need advice from an anthropologist, psychologist or journalist, I have plenty of smart friends who are willing to help. More important than where the methods/theories/literature come from is that any claim we make is robustly supported (or at the very least framed appropriately within its limitations).

[1] Newport, Cal. *Deep work: Rules for focused success in a distracted world*. Hachette UK, 2016.