Faculty Member Contact Information

Name	Alex Leith
Contact Info	
SIUE Email	aleith@siue.edu
Campus Box	Box 1771
Department	Mass Communications

1 Funded, 2 Unfunded URCA Assistant

	This position is **ONLY** open to students who have declared a major in this discipline.	**M**
	This project deals with social justice issues.	💙
	This project deals with sustainability (green) issues.	🍃
X	This project deals with human health and wellness issues.	➕
	This project deals with community outreach.	✋
	This mentor's project is interdisciplinary in nature.	I

Are you willing to work with students from outside of your discipline? If yes, which other disciplines?

Yes

How many hours per week will your student(s) be required to work in this position?
(Minimum is 6 hours per week; typical is 9)

6-8

Will it be possible for your student(s) to earn course credit?

Location of research/creative activities:

DH 1017

Brief description of the nature of the research/creative activity?

This research investigates the evolving landscape of virtual meeting platforms, critically analyzing how these digital environments can significantly enhance well-being, equity, and inclusion, particularly for underrepresented groups within the remote workforce. Central to this inquiry is the examination of video game developers, a dynamic cohort that excels in virtual collaboration across a diverse spectrum of design, programming, and artistic disciplines. Employing a mixed-methods research approach, this study identifies the features of virtual meetings that promote equity and alleviate the widespread phenomenon of remote interaction fatigue, thereby providing insights that extend beyond the gaming industry.

The research is organized into several dynamic and ongoing studies:

Study 1: Utilizing advanced natural language processing (NLP) techniques, this study analyzes discourse surrounding key issues of virtual meeting fatigue, equity, and well-being as expressed on social media platforms, thus capturing the sentiments and experiences of remote workers.

Study 2: This comprehensive survey targets remote workers to gather extensive data that elucidates the statistical correlations between specific virtual meeting features and user wellness, revealing the nuanced realities of the remote work experience.

Study 3: Adopting a qualitative perspective, this study conducts in-depth interviews with video game developers to enrich quantitative findings with diverse viewpoints and illuminate the complexities inherent in virtual meeting experiences.

Study 4: Through a methodologically rigorous online experiment, this study tests hypotheses related to which virtual meeting features can meaningfully enhance well-being, reduce fatigue, and foster social equity, facilitating a scientific examination of user experience.

Study 5: Advancing the frontiers of innovation, this study involves the prototyping and user-testing of an advanced virtual reality (VR) meeting platform tailored specifically for game development teams, thereby validating essential design elements aimed at nurturing inclusivity and enhancing well-being.

Concurrently with these research initiatives, an effort is underway to develop a publicly accessible "Guide to Virtual Meetings for Well-Being and Equity." This guide is designed to distill scholarly findings into practical, actionable recommendations, empowering organizations to create more equitable and supportive virtual environments.

Students engaged in this transformative project will gain hands-on experience with a variety of research methodologies, including natural language processing, survey design and analysis, interview coding, experimental design, and user experience (UX) testing. Furthermore, they will have the opportunity to contribute to data analysis, manuscript preparation, and the invigorating experience of presenting at conferences, thereby acquiring invaluable skills and insights throughout their engagement with the research.

Brief description of student responsibilities?

Students selected for this innovative research project will engage in a multifaceted exploration of the research process, actively contributing to its outcomes in ways tailored to their interests and capabilities.

Data Collection and Management:

Their work will begin with data collection and management, where they will conduct robust qualitative data collection by facilitating focus groups and conducting in-depth interviews. This process will capture rich personal narratives that illuminate the experiences of participants. Additionally, they will administer and oversee online surveys designed to gather diverse responses from remote workers, ensuring a comprehensive understanding of various environments and contexts. They will methodically organize, clean, and prepare the data in RStudio to prepare for analysis, thus maintaining the integrity and clarity required for deriving profound insights.

Data Analysis and Coding:

Students will delve into data analysis and coding. They will explore sentiment and topic analysis by applying advanced natural language processing techniques to a comprehensive dataset drawn from social media, revealing underlying trends and sentiments. The qualitative interview data will be coded through thematic analysis, enabling the identification of significant patterns that shed light on participants' experiences during virtual meetings. Furthermore, they will analyze survey responses and experimental data to uncover intricate relationships between the features of virtual meetings and participant well-being, thus highlighting nuanced connections.

Manuscript and Presentation Support:

Students will contribute to the development of compelling research manuscripts. They will conduct thorough literature reviews and synthesize findings, enhancing narratives with engaging data visualizations. Their efforts will also extend to creating visually impactful conference posters and presentations showcasing the project's discoveries at regional and national academic forums.

VR Prototyping and User Testing:

Students will be critical in user testing and evaluating an innovative virtual meeting platform prototype. By utilizing immersive virtual reality technologies, they will enhance user experiences and collect rigorous feedback to refine the platform's features, aligning with the overarching goals of inclusivity and participant well-being.

Grant and Report Writing:

Participants will support the comprehensive process of preparing ongoing grant applications and collaborating on progress reports for funding agencies, effectively highlighting the project's milestones and aspirations.

Throughout their participation, students will regularly convene for project meetings, engaging in rigorous discussions about findings and fostering an environment that promotes the development

of research questions aligned with the project's objectives. Advanced students can assume leadership responsibilities, manage specific project tasks, or co-author impactful research publications, thereby enriching their academic and professional trajectories.

URCA Assistant positions are designed to provide students with *research or creative activities* experience. As such, there should be measurable, appropriate outcome goals. What exactly should your student(s) have learned by the end of this experience?

At the culmination of this comprehensive research initiative, students will emerge equipped with a diverse and advanced skill set that will empower their academic trajectories and professional careers. The specific learning outcomes are delineated below:

Research Design and Methodology:

Participants will acquire an in-depth understanding of mixed-methods research, mastering the comprehensive design, execution, and analysis of surveys, interviews, and experiments with precision. They will develop proficiency in qualitative coding and thematic analysis, enabling the extraction of significant insights from their data. Engagement with natural language processing and sentiment analysis will also prepare them to navigate and interpret vast datasets from social media, enhancing their data literacy in contemporary research contexts.

Data Management and Analysis:

Students will become proficient in the complexities of data preparation, cleaning, and analysis utilizing RStudio and various analytical tools. They will cultivate the capacity to interpret and synthesize quantitative and qualitative findings, articulately addressing complex research inquiries and deriving meaningful conclusions grounded in empirical evidence.

Communication and Dissemination:

Students will refine their communication skills by preparing academic manuscripts, visually engaging research posters, and compelling conference presentations. They will also gain substantial exposure to the peer-review process, fostering an appreciation for scholarly publishing standards and the subtleties of academic discourse.

Ethical Research Practices:

A fundamental aspect of this experience will involve cultivating a profound awareness of the ethical considerations intrinsic to research involving human subjects. Students will understand the importance of informed consent, participant privacy, and the imperative of equitable representation, ensuring their research endeavors are conducted with integrity, respect, and social responsibility.

Problem-Solving and Critical Thinking:

Students will sharpen their critical thinking capabilities through active engagement with complex datasets and a focus on developing innovative solutions to enhance virtual meeting environments. This will empower them to address challenging problems confidently and creatively, fostering an analytical mindset.

Collaboration and Leadership:

The inherently collaborative nature of this research initiative will promote the development of strong teamwork competencies honed through participation in an interdisciplinary, multi-institutional research team. Students will also be afforded opportunities to assume leadership roles, manage project tasks, mentor colleagues, or contribute as co-authors on research publications, preparing them for future professional challenges.

Upon completing this transformative experience, students will be well-prepared to pursue advanced research or embark on graduate studies and careers in social science, media studies, human-computer interaction, or data analysis. They will depart with a profound understanding of how technology can be harnessed to promote well-being and equity in the workplace, thus leaving a significant and lasting impact on their future endeavors.

Requirements of Students

If the position(s) require students to be available at certain times each week (as opposed to them being able to set their own hours) please indicate all required days and times:

NA

If the location of the research/creative activities involves off campus work, must students provide their own transportation?

NA

Must students have taken any prerequisite classes? Please list classes and preferred grades:

NA

Other requirements or notes to applicants:

NA