Computer Science Seminar

Human-Centered Algorithms for Assessing Deviant Mental Health in Online Communities

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Abstract: Social media can provide a rich platform for those seeking better health. Yet, it can also provide space for deviant mental health behaviors, highly dangerous and stigmatized behaviors related to mental health. These behaviors are dangerous to participants in the communities as well as to platform health. However, the deep complexities of mental health and these clandestine behaviors resist straightforward, data-driven approaches to detection and intervention.

In this talk, I will describe how human-centered algorithms can identify and assess deviant mental health behaviors in online communities. This work combines methods from machine learning, natural language processing, and data science with interdisciplinary insights from psychology and sociology. Using the case study of pro-eating disorder communities, I will show how human-centered insights to algorithms enable robust computational models that identify mental health signals in social media. Then, I will demonstrate how these algorithms can be used to understand latent impacts of these behaviors in online communities, such as content moderation and deviant behavior. I will conclude with discussing how human-centered insights can be brought to computational methods to answer our toughest questions about deviant behavior online.

Friday, December 7, 2018, 3:00 pm Mathematics and Science Center: W201

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