

Instructor

Kevin Blasiak

Course

Critical Algorithm Studies

Course Description

This course offers an interdisciplinary approach to understanding the ethical, political, and social dynamics of algorithmic systems. By exploring the ways algorithms influence and interact with society, we critically assess both the harms and safeguards involved in today's technological landscape. The course is designed for students to engage deeply with topics such as inequality, bias, transparency, accountability, fairness, misuse, and responses to challenges posed by algorithms in real-world settings.

Learning Outcomes

Upon successful completion of this course, students will be able to:

- Identify critical issues and ethical dilemmas in algorithmic systems, especially concerning trust & safety.
- Analyze technical, social, and policy-based responses to online harms, such as misinformation, extremist content, harassment, and other trust & safety challenges.
- Gain a well-rounded understanding of the societal impact of algorithms through topics like algorithmic bias, transparency, and fairness, and develop an in-depth comprehension of at least one selected topic.

Course Topics

In weekly sessions, students will discuss readings that connect theoretical and practical perspectives from diverse fields, including Science and Technology Studies (STS), Sociology, Communication, and Law. Topics include:

- Introduction to Critical Algorithm Studies and Trust & Safety: Overview of the field and the interplay between algorithms and society.
- Algorithmic Imaginaries and Future Scenarios: Speculative visions of algorithmic futures.
- Trust & Safety in Algorithmic Systems: Examining how online harms manifest and are mitigated by providers.
- Bias, Fairness, and Accountability: Critical reflections on the values embedded in algorithmic decisions and design.

- Trust & Safety Engineering and Technological Solutions: Technical solutions to harmful online behavior, including detection and intervention methods.
- Ethical and Legal Perspectives: Examining the evolving legal frameworks and ethical principles guiding trust & safety.

Learning Approach and Assignments

The course includes a blend of lectures, discussions, presentations, and a final seminar paper. Weekly student-led presentations will guide group discussions on assigned readings. Final papers should reflect an integrated understanding of course topics, with a focus on critical analysis of trust & safety issues within algorithmic systems.

Final Project

Students will work in cross-disciplinary teams to devise a technical or policy-oriented trust & safety solution to a contemporary challenge, exploring both social and technical interventions to reduce harm online.

Content Note

This course discusses real-world cases of harmful online behavior, including harassment, misinformation, and exploitation, which may involve exposure to sensitive content. The course aims to equip students with the knowledge and skills to critically engage with these issues responsibly and constructively.