2. Borders and Mobility: Examining Social Implications of Border Technology

Justin Lahey, PhD student, University of Waterloo

Advanced biometric systems, such as facial recognition technology (FRT), offer a partial solution to making identity confirmation more efficient, but have also led to unintended consequences, such as demographic bias. The problem with demographic bias in FRT is multi-layered. Researchers identified significant inaccuracies with its use with different demographic groups over 20 years ago, which is further exacerbated by competing vocabularies and multiple interpretations of bias. These challenges complicate both our understanding of the problem and any attempts to rectify it. There is limited academic research on the various definitions and dimensions of bias. My research will address this gap with the following question: How is demographic bias defined and enacted by different epistemic communities across a broader FRT network assemblage? Using mixed methods and framework analysis, I will examine and compare different definitions and enactments of bias across civil society, academia, the Government of Canada, and international standards setting agencies, to identify gaps and propose policy improvements. Rather than improving the quantitative performance of the technology, the focus should be on broadening our understanding of bias and identifying how the policies and standards that govern its use can better reflect the different enactments of bias across diverse communities.