

NIST Workshop: Challenges for Digital Proximity Detection in Pandemics: Privacy, Accuracy, and Impact

26-28 January 2021 | 10:00 AM – 3:30 PM EDT

Free, virtual event via BlueJeans | Registration required, limited to 400 attendees



Background: In the last nine months the world has seen the emergence of information technologies designed to provide portable proximity detection for the purpose of limiting the spread of respiratory infectious diseases. These technologies include wearables that provide alerts when social distance is not maintained, applications that enable coordination with public health officials to provide exposure notification and/or augment manual contact tracing, and the use of encounter metrics to inform space occupancy limits and environmental controls management. Efforts to address questions about effectiveness and privacy are taking place within non-profit organizations, academia, commercial entities, public health and government.

Objective: Provide a forum to discuss successes and challenges associated with implementation of proximity detection technologies and identify areas in which additional effort is required. These areas could be, but are not limited to, privacy, testbeds, machine learning, modelling, new technologies, data and standards, commercialization, and validation and verification.

Format: The first day features speakers on different aspects of proximity detection and the existing challenges. The second day features a panel discussion and facilitated break-out sessions that provide opportunity for community engagement on ways to overcome the challenges presented in the first day. The final day features a reports from the break-out session and a wrap-up discussion.

Output: The invited speakers and panel discussion will be recorded and released along with a written report.

TOPICS:

Challenges – When implemented, how well and in what situations will the technology reduce the spread of infectious disease? How can we predict the impact? What more do we need to know to improve models?

Privacy – How are privacy risks generated by these technologies being managed? How can privacy gains or losses be understood with different implementations?

Effectiveness – How accurate are various proximity detection technologies? What data are needed to determine accuracy? What are the considerations for platforms and ranging technologies (e.g. smartphones, wearables, Bluetooth RSSI, ultrasonic ranging, etc.)?

Looking Toward the Future – What are the longer-term applications and directions that should be developed? What are community needs? What is the role of government? What are challenges for commercialization?

PARTICIPATE:

We invite the community of stakeholders to participate in the workshop by sharing their views on this rapidly developing discipline.

Register: Please visit our website at [Challenges for Digital Proximity Detection in Pandemics: Privacy, Accuracy, and Impact](#) to register.

Submit an Abstract: NIST welcomes the submission of 1-page technical abstracts for 10-minute oral presentations. Please email abstracts to NIST-workshop-pandemic-technologies@nist.gov by 12 PM ET, Jan. 4, 2021, including presenter first and last name, affiliation, contact email address, and title.