EXHIBIT F

Internet Policy Research Initiative
Massachusetts Institute of Technology

Progress Report #1: Privacy Education and Design Lab (PEDaL)
June 2023

Project Summary

The new MIT Privacy Education and Design Lab (PEDaL is developing new approaches to privacy education and research to assure that the software developers educated at MIT will learn to be aware of privacy risks as a core part of their computer science education. PEDaL will building on the novel, multi-disciplinary education approach of MIT's Internet Policy Research Initiative by extending two courses currently offered by IPRI faculty: 6.4590: Foundations of Internet Policy, and 6.S978: Privacy Legislation Law and Technology (offered jointly between MIT Electrical Engineering and Computer Science Department and Georgetown Law School (see New York TImes: Natasha Singer, Top Universities Join to Push 'Public Interest Technology', March 11, 2019; MIT Spectrum, Legal/Code-MIT engineering students team up with Georgetown lawyers-in-training on internet privacy legislation, Winter 2018). These courses teach 30+ computer science and engineering students each semester to develop the intellectual skills necessary to understand the complex public policy questions, including privacy, raised by computing in our society today. PEDaL will add a hands-on laboratory component to each course giving students in-depth experience of actually building and analyzing technical systems that address privacy harms. PEDaL will materially advance the interests of the Class in Joffe v. Google, helping to assure the members of the class, and those similarly situated in the future are far less likely to be victims of privacy harm arising from poorly-educated software developers and careless product managers.

PEDaL will also lead technical research on privacy-enhancing data systems and analytic techniques to develop new software architectures that reduce the risk of privacy harm such as was suffered by the plaintiff class. We propose to lead research projects in the following areas:

- Database Systems: Explore new data management architectures to provide enterprises with purpose management, provable delete and automated accountability tools for managing personal data according to legal rules and institutional commitments. Database systems that do a better job of tracking legal purposes, and detecting unlawful purposes, are possible and could go a long way to alert against harm experiences in the Streetview case.

- Human Computer Interaction: Apply rigorous HCI research methodologies to understand the impact of various privacy policy environments on user behavior and learn when the user experience is producing chilling effects. This research will inform both services design and policymaking.

Background

Project home: Project Principal Investigation, Daniel J. Weitzner, holder of the 3Com Founders Senior Research Scientist chair at the MIT Computer Science and Artificial Intelligence Lab (CSAIL), founded IPRI in 2015 as a response to the critical need for technology-informed policy making in the areas of privacy, security, networks and the Internet economy. The group plays an important bilingual role of informing policy making with technical expertise, and helping engineers build secure and privacy protecting products that are informed by policy. To achieve this mission, IPRI produces fundamental, cross-disciplinary technology and policy research (an average of 38 research papers a year since 2018); engages with global policymakers, industrial partners, and civil society organizations; and is building a network of students educated in the field of Internet policy.

MIT is one of the top research universities in the world across a number of disciplines, including engineering, computer science, and economics. MIT has 11,376 students and 13,000 employees. Recently the Institute announced the creation of the Schwarzman College of Computing which represents a new paradigm for computer science research and education that recognizes the importance of addressing the social, ethical and policy impact of computing on society.

IPRI's senior leadership has strong consumer and Internet civil liberty advocacy backgrounds. Daniel Weitzner was the first staff member in Washington DC for the Electronic Frontier Foundation and founder of the Center for Democracy and Technology. He was also a senior policymaker (White House Deputy CTO for Internet Policy). While at the White House, Weitzner was responsible for developing the Consumer Privacy Bill of RIghts in 2012. Taylor Reynolds was the senior economist at the OECD responsible for the Internet economy, and his research on broadband pricing led to multimillion dollar fines against incumbent telecommunication firms engaged in deceptive advertising.

Of particular relevance, Daniel Weitzner has a long history of successful Internet civil liberties advocacy. His work led directly to amendments to the Electronic Communications Privacy Act in 1994 that offered groundbreaking protections for web browsing logs, email records, and other

transactional data. (18 USC 2703(d)) Under Weitzner's leadership, the interests of the Class in better privacy protection will be materially advanced.

Expenditures

Between January 1 and May 2023, PEDal has expended a total of $79,168.42, including $32,929.64 in personnel costs covering initial research and planning for the new course curriculum as well as $27,491.67 to support a new conference series on computer science and law, along with other costs of $18,747.11 covering general operating expenses for the lab. Our spending reflects primarily planning and start-up costs for PEDal, which we expect to expand significantly at the start of the new academic year in September 2023. Details on expenditures are provided in the Activities section below.

Activities

- Research in preparation for new privacy curriculum: In order to target the new privacy curriculum we have conducted an extensive study of the work environment and training requirements for computer science graduates being hired into a new job category known as Privacy Engineering. More and more organizations are hiring software engineers into this job category but it does not yet have a clearly established set of professional qualifications. Our aim is to design the PEDal curricular to meet these new needs in the software profession in order to contribute to the design of more privacy-aware systems and services. We conducted an in-depth study of this emerging new field with the following results:
  - A Master's thesis entitled, "Privacy Law in Practice: Exploring Challenges to Modern Privacy Compliance," by IPRI student Shabnum Gulati and supervised by PEDal PI Weitzner.
  - An academic paper presented at the premier privacy law workshop, the Privacy Law Scholars Conference, entitled "Privacy Law in Practice: Exploring Challenges to Modern Privacy Compliance," authored by Gulati, Weitzner, and IPRI Research Scientist Dr. Ilaria Liccardi.

  This study will be used to shape course materials and future PEDal research agendas.
- PEDal provided leadership and financial support to a new conference called the ACM Symposium on Computer Science and Law, designed to be a leading venue for interdisciplinary scholarship conducted by computer scientists and lawyers. We are pleased that based on the success of this Symposium that the sponsoring organization, the Association for Computing Machinery (the leading professional and academic society in computer science) has agreed to support this symposium on an ongoing basis. This symposium is vital as a venue for encouraging interdisciplinary scholarship by lawyers and computer scientists working together, a key requirement for making progress on privacy law, public policy and privacy-aware computer systems design.