CAMBRIDGE SOCIAL SCIENCE PARTNERSHIP – INTERNSHIP PROJECT

General Information

Title: Why privacy? A look at the changing role of privacy in an increasingly data driven society

Non-Academic partner: Privitar

Role/Sector: Tech

Location: Capital Tower, 91 Waterloo Road SE1 9RT

Duration: 3 months

Start date: Preferably Autumn 2017 but negotiable

Full or Part time: Preferably full time but with some flexibility

Who are you going to work with

Privitar is an enterprise software company headquartered in London, with a global client-base across North America, Europe and Asia. Privitar is leading the development and adoption of privacy engineering technology, enabling our customers to innovate and leverage data with an uncompromising approach to data privacy. The world is waking up to privacy risk and privacy harms. There is a clear realisation that unless we incorporate privacy into every aspect of the data supply chain we run the risk of impeding innovation and exposing customers to harm. Privitar's mission is to promote and facilitate the ethical and safe use of valuable data assets. Using leading privacy engineering techniques, we help companies get maximum value from data while preserving customer's privacy.

How do you expect to spend your day

The last 20 years has seen digitisation transform all industries. Driven by increases in data collection technologies, data processing and storage, and analytical tools. There is enormous societal and economic value in these advances. However, a by-product of this transformation has been a dramatic shift in the nature and scale of risks to individual's privacy. Historically, industrial revolutions have brought both innovation and social harms. Society then responds, transforming the technology or its use so benefits could be delivered without the commensurate harms. The physical dangers of the industrial revolution in the UK were somewhat mitigated by the Factory Acts. The use of automobiles in the 20th century was adjusted by driving licenses and seatbelts. New technologies such as machine learning and the Internet of Things promise to have a similarly fundamental social and economic impact, with privacy harms as the undesired by-product. As society responds to these changes, it needs to consider what privacy harms are acceptable, and how risks to privacy can be mitigated. This project would look at some of the core questions surrounding this issue, such as:
- What types of data are commonly collected, processed and shared about individuals? Taking into account emerging technologies and trends such as IoT, mobile and big data analytics.
- What are the privacy risks which arise as a result of this processing, and how do these risks manifest as privacy harms?
- Are the categories of harm identified by NIST; Loss of Trust, Discrimination, Loss of Self-determination and Economic Loss, the best way to understand the problem, and if so what are the sub-categories within these?
- What variables affect the impact and likelihood of these harms?

If the intern works full time, then we may also ask them to look at:
- How are individuals' relationship with privacy changing? Are people becoming more aware of privacy risks? If so, what is driving this and how is it affecting their behaviour?

We would expect the parameters and detail of the project to be developed in conversation with the intern, but envision that this project could consist of the following:

- A literature review of some of the texts which look at what privacy is, what harms can be caused by its loss, and how these harms are realised. Privitar is aware of many of these texts, but there may be key papers missing. Filling out this library is a driver of this project.
- Interviews with those working in relevant technologies to better understand the data and tools being used. Privitar could assist with setting up some interviews, but would expect the intern, with support, to be approaching additional organisations/individuals.
- A survey, gauging public perception and expectations (possibly)
- Working with others to produce educational resources relating to data sharing, privacy attacks and privacy harms (possibly)

The outputs of this project would be:

- A report detailing the researcher's findings. 5,000-10,000 words. Aimed at those working in policy or social sciences. Including a summary of the relevant texts, data types, privacy harms, and variables affecting the risk of the harms.
- Two shorter (two sides) pieces appropriate for use by marketing on two select issues, for instance: "The risks of sharing location data".
- A summary of survey findings (possibly, likely only if the intern is working full time)
- Educational materials (possibly, and would be as part of a wider project)

The ideal intern's personality and qualifications

Whilst the intern will have access to support and guidance form Privitar, much of the work will need to be done independently. This means a successful intern would need to be:

highly motivated; creative and innovative; capable of operating independently; capable of working well with others; entrepreneurial; effective at time and task management; an excellent communicator; ambitious; professional

Privitar works at the cutting edge of technology on an issue of high social importance. An intern excited and interested in technology, how technology affects society, and privacy specifically, would be best positioned to take advantage of the opportunity.

Essential skills:

Planning; analysis; research; drafting.

Desirable skills:

Privacy crosses various fields. We do not expect the intern to have experience in all relevant fields. However, if they had experience in one of the following, it would be a distinct advantage:

- Data Science. This would enable a better understand of the underlying technologies, the types of technological solutions available, and Privitar's software.
- Economics. Understanding the economics could provide valuable insight into how these new technologies are driving economic value.
- Law. A significant component of the societal response is through regulations, e.g. GDPR
- Cyber security. Understanding data breaches and cyber threats would be helpful as this is one of the ways in which privacy risks can be realised.
- A technical discipline, e.g.: engineering, statistics, computer science, programming, etc.
- Public policy. Experience of working in/on public policy would be generally useful.

What are the benefits of Interning on this project

Some of the benefits include the opportunity to:

- Learn about the state of the art in privacy engineering;

- Learn about highly disruptive and emerging technologies, and their implications for privacy;

CAMBRIDGE SOCIAL SCIENCE PARTNERSHIP – INTERNSHIP PROJECT

- Work with exceptional staff and learn from their diverse backgrounds in technology, research, finance, telecommunications and Government;

- Experience what working in an early stage technology company is like, during a period of rapid growth and expansion;

- Gain exposure to what is happening in Privitar's key industries; FS, Telco and HMG

Apply for this role

If you are interested in applying for this opportunity, please email the completed application form and a CV to esrcdtc@admin.cam.ac.uk.

Please note that all applications must be approved by the applicant's PhD supervisor. The application deadline is **September 20 2017**. Results will be announced early October 2017.