Timothy Patrick Libert

CyLab Security and Privacy Institute
Carnegie Mellon University
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Research Interests

Computer Security & Privacy, Internet Governance & Policy, Web-Scale Data Mining & Analysis, Free Expression & Censorship

Academic, Research, & Professional Appointments

Special Faculty, Carnegie Mellon University, 2018 - Present.

Post-Doctoral Research Fellow, University of Oxford, 2017-2018.

Visiting Fellow, Alexander von Humboldt Institute for Internet and Society, Berlin 2016.

Senior Fellow, Information Controls Fellowship Program, Open Technology Fund, 2015.

Visiting Fellow, Center for Media, Data, and Society, Central European University, Budapest 2015.

Research Consultant, Ranking Digital Rights Project, New America Foundation, 2012-2015.

Doctoral Research Fellow, University of Pennsylvania, 2012-2017.

Web Developer and IT Administrator, New York University, 2005-2012.

IT Administrator, Computer Forensics, Stroz Friedberg, LLC, 2004-2005.

Education

Ph.D. Communication, University of Pennsylvania, 2017.

    Comprehensive exams passed with distinction.

    Interdisciplinary coursework and advisement in Computer Science, Communications Regulation, Law, Business, and Social Theory.

    Dissertation: *Track the Planet: A Web-Scale Analysis of How Online Behavioral Advertising Violates Social Norms*

B.A. Major Sociology, Minor Computer Science, New York University, 2004.

Grants

Digital Health Privacy Initiative, Public Interest Technology University Network (with Penn Medicine). 2021-Present.

Large-Scale Analysis of Medically-Targeted Online Advertising and User Health Privacy Concerns, CyLab. 2020-Present.

Agile Dimorphic Execution for Dispersed Computing, DARPA. 2019-Present.

Third-Party Network Traffic Attribution for IoT, TV, Web, and Mobile, CyLab. 2019-Present.

Flash Grant, Shuttleworth Foundation. 2015.

Fellowships, & Awards

Best Paper Award, ACM Conference on Web Science. 2018.

Best Paper Nominee, The Web Conference (WWW). 2018.

Dissertation Fellowship, Annenberg School for Communication, University of Pennsylvania. 2016 - 2017.

Research Fellowship, Annenberg School for Communication, University of Pennsylvania. 2012 - 2016.

Top Student Paper, International Communication Association, Communication and Technology Division. 2015.

Consortium on Media Policy Studies Research Fellowship. Summer 2013.

Courses Taught

Engineering Privacy in Software, Carnegie Mellon University, 2019-Present.

Privacy Policy, Law, and Technology, Carnegie Mellon University, 2018-Present.

Privacy Seminar, Carnegie Mellon University, 2018-Present.

Information Technology Policy: Evidence, Communication, and Advocacy, Carnegie Mellon University, 2019.

Courses as Teaching Assistant

Free Expression, University of Pennsylvania, 2015.

China Today, University of Pennsylvania, 2014.

Publications

Peer-Reviewed

McCoy, Matthew S; Libert,Timothy; Buckler,David; Grande,David T; Friedman,Ari B (2020). Prevalence of Third-Party Tracking on COVID-19–Related Web Pages *Journal of the American Medical Association (JAMA).*

Maris, Elena; Libert, Timothy; Henrichsen, Jennifer (2020). Porn, Privacy and the Vulnerable: The Implications of Third-Party Tracking on Porn Websites. *New Media and Society.*

Libert, Timothy; Binns, Reuben (2019). Good News for People Who Love Bad News: Privacy, Trust, and Security Implications of Third-Party Content on U.S. News Websites *ACM Conference on Web Science (WebSci '19).*

Libert, Timothy (2018). An Automated Approach to Auditing Disclosure of Third-Party Data Collection in Website Privacy Policies. *The Web Conference (WWW2018). Best Paper Nominee.*

Binns, Reuben; Lyngs, Ulrik; Van Kleek, Max; Zhao, Jun; Libert, Timothy; Shadbolt, Nigel (2018). Third Party Tracking in the Mobile Ecosystem. *ACM Conference on Web Science (WebSci '18). Best Paper Award.*

Libert, Timothy (2015). Privacy Implications of Health Information Seeking on the Web. *Communications of the Association for Computing Machinery.*

Libert, Timothy (2015). Exposing the Hidden Web: Third-Party HTTP Requests On One Million Websites. *International Journal of Communication*

Libert, Timothy; Grande, David, MD, MPA; Asch, David A. MD (2015). What Web Browsing Reveals About Your Health. *The BMJ (British Medical Journal).*

Editorial

McCoy, Matthew S; Libert,Timothy; Friedman,Ari B (2020). Online privacy loss: another Covid-19 aftershock. *STAT*.

Libert, Timothy (2019). This Article is Spying on You. *The New York Times*.

Libert, Timothy; Repnikova, Maria (2015). Google is returning to China? It never really left. *The Guardian.*

Libert, Timothy; Pickard, Victor (2015). Think you're reading the news for free? New research shows you're likely paying with your privacy. *The Conversation (Republished in Newsweek & Fortune).*

Whitepapers

Libert, Timothy; Graves, Lucas; Nielsen, Rasmus Kleis (2018). Changes in Third-Party Content on European News Websites after GDPR. *Reuters Institute for the Study of Journalism, University of Oxford.*

Libert, Timothy; Nielsen, Rasmus Kleis (2018). Third-Party Web Content on EU News Sites: Potential Challenges and Paths to Privacy Improvement. *Reuters Institute for the Study of Journalism, University of Oxford.*

Open Technology Institute. Health Privacy Online: Patients at Risk. *Comment for Submission to Federal Trade Commission.*

Book Chapters

Media Activism in the Digital Age. Routledge, 2017. *Introduction to Section II: Policy Interventions*

Multimedia

Privacy Implications of Health Information Seeking on the Web (Video)
Youtube: https://www.youtube.com/watch?v=OqW8erWi1Wo

Software

webXray, GNU Public License, 2015.
Project Page: http://webxray.org
GitHub: https://github.com/timlib/webxray

Expert Witness

WINSTON SMITH, et al. v. FACEBOOK, INC., et al. *United States District Court, Northern District of California, 2016.*

Invited Lectures and Panel Appearances

Tufts University, The Future of Democracy in the Age of Disinformation: Innovating Policy Solutions for a Networked World, 2019.
Panelist: Can the Platforms Save Us?

Netzpolitische Abend, C-Base, Berlin, 2016.
Web Scale Analysis of Third-Party Tracking with webXray: Techniques and Findings

School of Public Policy, Central European University, 2015.
Web Tracking with Chinese Characteristics

Center for Media, Data, and Society, Central European University, 2015.
Web Tracking with Chinese Characteristics

University of Oxford, 2015.
Web Tracking with Chinese Characteristics

University of Pennsylvania, 2015.
Ranking Digital Rights

University of Pennsylvania, 2014, 2015.
Internet Censorship in China

University of Pennsylvania, 2013, 2014.
The National Security Agency in Context.

University of Pennsylvania, 2012, 2013.
Privacy Risks for Online Activists

Conference and Seminar Presentations

Social Informatics, 2017
On the Impossibility of Accepting the Unknown: A Web-Scale Analysis of the Failure of Notice and Choice

Schloss Dagstuhl: Online Privacy and Web Transparency, 2017
Surveillance as a Regulatory Model

Hackers on Planet Earth (HOPE), 2016
Deconstructing Ad Networks for Fun and Profit

International Communications Association, 2016
The Logic of Connective Surveillance

Princeton Center for Information Technology Policy / University of Vienna Media Innovation Lab Doctoral Workshop, 2016
Web-Scale Regulatory Failure: An Empirical Examination of Self-Regulation and Violations of Contextual Integrity on the Web

Computers Privacy and Data Protection, 2016
The Logic of Connective Surveillance

The Empiricist's Challenge: Asking Meaningful Questions in the Age of Big Data, Mannheimer Zentrum für Europäische Sozialforschung (MZES), 2015
Web Tracking with Chinese Characteristics

International Communications Association, 2015
Web Tracking with Chinese Characteristics

Union for Democratic Communication, 2015
The Logic of Connective Surveillance

RightsCon Southeast Asia, 2015
Smartphones and Human Rights: Developing Evaluation Criteria for Complex Systems

Global Implications of Mobile Ubiquity: Research, Culture, and Policy, 2014
Ranking Digital Rights: A Framework for Evaluating Human Rights in a Mobile Context

Chinese Internet Research Conference, 2014
Web Tracking with Chinese Characteristics: A Critical Perspective on the Emerging Online Surveillance Market in China

International Communications Association, Data and Discrimination: Converting Critical Concerns into Productive Inquiry, 2014
Privacy Implications of Health Information Seeking on the Web

RightsCon Silicon Valley, 2014
Holding Companies Accountable On Free Expression And Privacy, Group Participant

New York University Neil Postman Graduate Conference, 2014
Exposing the Invisible Web: An Analysis of Corporate-Sponsored Data Collection on One Million Websites

International Open Access Week, University of Pennsylvania Libraries, 2013
Civic Hacking: Creating an Open Government through Technology, Invited Respondent

Selected Press

Television and Radio

2017

Deutschlandfunk (Germany)
Und sie wissen, was du tust

2015

Good Morning America
Online Medical Searches May Be Sold

All Things Considered, National Public Radio
Online Health Searches Aren't Always Confidential, Interview with Robert Siegel

ABC 6 Television News, Philadelphia
Your Health Info May Be Bought and Sold Online

WHYY Public Radio, Philadelphia
Who gets access to the data my Apple Watch collects?

WHYY Public Radio, Philadelphia
Most health information web pages are tracked, Penn study finds

Print and Web

2020

BBC (United Kingdom)
UK councils' benefits pages push credit card adverts

Vox (United States)
Our phones can now detect health problems from Parkinson's to depression. Is that a good thing?

Cure (United States)
Full Disclosure, Your Health Information Isn't Private

Harrogate Advertiser (United Kingdom)
Harrogate Council found to use third-party advertising cookies on website without asking for consent

St. Helen's The Reporter (United Kingdom)
St Helens Council to review cookie use on its website following BBC investigation

The Packet (United Kingdom)
Cornwall Council had advertising cookies on website

Cornwall Live (United Kingdom)
Cornwall Council accused of sharing people's data without their consent

Daventry Express (United Kingdom)
Revealed: Northampton, South Northants councils allow advertisers to gather residents' data without their consent

Devon Live (United Kingdom)

Investigation finds Torbay council targeting online ads at people seeking benefits advice

Northampton Chronicle (United Kingdom)
Revealed: Northampton, South Northants councils allow advertisers to gather residents' data without their consent

Portland Tribune (United States)
Critics: Oregon COVID-19 symptom checker raises privacy concerns

2019

Financial Times (United Kingdom)
A health warning for your data

Financial Times (United Kingdom)
How top health websites are sharing sensitive data with advertisers

New Scientist (United States)
Thousands of pornography sites leak data to Google and Facebook

Daily Mail (United Kingdom)
Health websites in the UK 'share search terms with advertisers'

National Magazine (Canada)
Reforming privacy in the age of AI

New York Times (United States)
Facebook and Google Trackers Are Showing Up on Porn Sites

New Kerala (India)
Google, Facebook secretly track as you watch porn

Forbes (United States)
Google And Facebook Secretly Track Your Activity On Porn Sites

CNET (United States)
Google and Facebook might be tracking your porn history, researchers warn

The Verge (United States)
Google and Facebook's tracking software is widely used on porn sites, shows new study

New York Post (United States)
Facebook and Google can see what porn you're watching

Business Insider (United States)
Facebook and Google track what porn you're watching, even when you're in incognito

The Daily Dot (United States)
Facebook and Google could be tracking you on porn sites

Orlando Sentinel (United States)
Vast majority of porn sites track user data, often without telling you

Axios (United States)
Study: Porn sites secretly track users

ZD Net (United States)
93% of porn sites leak data to a third-party

The Daily Mail (United Kingdom)
Google and Facebook are tracking users as they watch PORN

Evening Standard (United Kingdom)
Google porn tracking: Search engine promises to restore private browsing mode following loophole discovery

Ars Technica (United States)

How private is your browser's Private mode? Research into porn suggests "not very"

Gizmodo (United States)
So, About Your Internet Porn Habits

MediaPost (United States)
Ad Trackers On Porn Sites: Yet Another Diamond In Internet's Crown

ArsTechnica (United States)
How private is your browser's Private mode? Research into porn suggests 'not very'

Breitbart (United States)
Report: Google and Facebook Are Tracking Porn Viewing Habits

Der Standard (Austria)
Google und Facebook tracken Pornoseiten auch im Inkognito-Modus

Heise Online (Germany)
Google und Facebook tracken auch auf Sex-Websites

Kenyan Times (Kenya)
Google and Facebook track you even if you surf porn sites in private mode

Mashable (United States)
No, Incognito mode won't keep your porn habits private. This will.

Metro (United Kingdom)
Porn sites are collecting your most intimate secrets and incognito mode won't protect you

National Herald (India)
Google, Facebook track porn-viewing habits

NDTV (India)
Google, Facebook Are Tracking Your Porn-Viewing Habits, and Incognito Mode Won't Save You

News of Emirates (United Arab Emirates)
Google And Facebook Might Be Tracking Your Porn History, Researchers Warn

Olhar Digital (Brazil)
Google e Facebook rastreiam acessos em sites pornô, diz estudo

Spider's Web (Poland)
Kogo ciekawi, jakie porno oglÄ. . . dasz i dlaczego jest to szef Facebooka?

Sputnik (Russia)
Study Claims Google, Facebook Keeping Watchful Eye on Porn Site Surfers

Stern (Germany))
Facebook und Google verfolgen uns Überall: Man kann nicht einmal unbeobachtet Pornos schauen

Süddeutsche Zeitung (Germany)
Wie Sie beim Pornoschauen beobachtet werden

The Next Web (US)
Google and Facebook are tracking your porn preferences - even in incognito mode

The Register (UK)
Incognito mode won't stop smut sites sharing your pervy preferences with Facebook, Google and, er, Oracle

The Star (Malaysia)
Google and Facebook track you even if you surf porn sites in private mode

ZDNet (US)
93 of porn sites leak data to a third-party

2018

CBC News (Canada)
Think twice before consulting Dr. Google, researchers say

2017

Canadian Bar Association, National Magazine
The $4 trillion question, How can we protect online privacy without stifling innovation?

2016

Urgente 24 (Argentina)
Una vergüenza que intereses y burocracia frenen la Historia Clínica Electrónica en hospitales argentinos

Editor & Publisher
Shoptalk: Why Journalists Need to Stand Up for Reader Privacy

Netzpolitik (Germany)
Tracking durch Drittanbieter auf einer Million Webseiten

Vice
What Happens to the Data Collected On Us While We Sleep

2015

20 Minutes (France)
Les recherches Web sur des problèmes médicaux ne sont pas si privées que ça

20 Minutes (France)
Web: Neuf sites sur dix partageraient vos données personnelles

ADSL Zone (Spain)
9 de cada 10 webs envían tus datos a terceros

Advertising Age
How Google's Alphabet Reorg Could Affect Its Health Data

Al-Jazeera America
The CDC knows what ails you — and now, so do many others

Agence Science-Press (Canada)
Internet : vous êtes encore plus suivi que vous ne le pensez

AuthomatiseringGids (Netherlands)
Op internet kijken minstens 5 partijen mee wat je uitspookt

Bangor Daily News
There's no doctor-patient confidentiality on the Internet

Boy Genius Report
It's almost impossible to stop Google and Facebook from knowing about your health-related searches

Business Standard (India)
Searching medical info online poses privacy risk

Cambodian Times
Online health details prone to risk of abuse

CBS Washington, DC
Study: 'Invisible Web' Threatens Health Privacy

CIO
Patients must know the perils of online medical research

City A.M. (UK)
Think you're not being tracked online? Our browsing habits are captured and leaked by nine out of 10 major websites

Consumer Affairs
Looking up medical info on the web poses a privacy risk

elPeriódico (Spain)
Los datos de actividad carecen de una protección específica

Fast Company
The Latest Privacy Risk? Looking Up Medical and Drug Information Online

Gear & Style Cheat Sheet
5 Things You Should Never Search on Google

HIV Plus Magazine
Your Anonymous Online Health Searches Are Apparently Not So Anonymous

iHealthBeat
Many Health-Related Web Pages Share User Data With Third Parties

Ilta-Sanomat (Finland)
Pornohistoriasi saattaa paljastua - selaimen yksityistila ei pelasta

IT Forum 365 (Brazil)
Nove de dez sites liberam dados de usuários para terceiros

Komando
Big business is tracking your online symptom searches

La Nacion (Argentina)
La historia clínica, última frontera de la privacidad

La Nacion (Argentina)
88% de los sitios web más populares filtran datos a terceros

LeVif (Belgium)
Au moins 5 'voyeurs' regardent ce que vous faites sur internet

Lifehacker
Why You Probably Shouldn't Look Up Health Symptoms Online

Medical Marketing & Media
Vice: Health search queries are being tracked

MNO (Hungary)
Adatterrorizmus a digitális küzdőtéren

Naked Security
How nine out of ten healthcare pages leak private data

NBC News
Cyber Monday: What Happens to Your Data When You Shop Online?

NDTV (India)
90 Percent of Websites Leak User Data to Third Parties: Study

PC Magazine (Greek Edition)
9 out of 10 website handing your data (Headline Translated)

R & D Magazine
Online Tracking: A Plight of the Modern Age?

Repubblica (Italy)
Scopre di avere un cancro, su Facebook trova la pubblicità delle pompe funebri: "Scandaloso"

Rizopoulos Post (Greece)
Why Facebook is threatened with a fine of EUR 250,000 per day (Headline Translated)

San Jose Mercury News

Health searches: Be careful who you tell about those cold sores

SC Magazine
Report: Majority of health-related websites leak data to third parties

Science 2.0
You're Being Tracked Online More Than You Realize.

Shape Magazine
How Safe Are Your Electronic Medical Records?

Šibenski portal (Croatia)
POGLEDAJTE ZAŠTO: Ovih pet stvari nikako nemojte pretraživati na internetu

Sunday Observer (Sri Lanka)
Health information at serious risk of abuse

Sympatico (Canada)
Internet : vous êtes encore plus suivi que vous ne le pensez

Techlicious
Third-Party Advertisers Are Spying on Your Medical Searches

Techsocial (Greece)
Research shows that 9 out of 10 sites make data leakage to third parties (Headline Translated)

Tech-WD (Saudi Arabia)
Study: 90 % of websites leak your data to third parties without your knowledge - the world of technology (Headline Translated)

Tech Republic
Online tracking by news organizations is excessive, say researchers

The Hill
Overnight Cybersecurity

The Hindu (India)
The death of privacy

The News Lens (Taiwan)
90% of sites provided tracker quietly put your information with third parties (Headline Translated)

The Next Web
Research reveals 9 of 10 websites leak user data to third parties

The Statesman (India)
Online health details prone to risk of abuse

The Tribune (India)
Searching medical info online poses privacy risk

Time/Money Magazine
Your Embarrassing Online Searches About Health Problems Aren't Private

Times of India
Latest privacy threat: Looking for health information online

Times of India
Facebook, Google may be leaking your data: Study

Version2 (Denmark)
Google overvåger brugere på 80 pct. af alle websites og ignorerer 'Do Not Track'-ønsker

Vice
Looking Up Symptoms Online? These Companies Are Tracking You

Vice

Nine Out of Ten of the Internet's Top Websites Are Leaking Your Data

Vice
Your Porn Is Watching You

Wired
Security News This Week: 9 Out of 10 Websites Leak Your Data to Third Parties

Wired (Italian Edition)
Nove siti su dieci distribuiscono dati a insaputa degli utenti

Xataka
Cuando buscas sobre una enfermedad, es muy probable que alguien esté recolectando esos datos

ZOL.com (China)
Survey: 90 % site visitor information will be disclosed to third parties (Headline Translated)

2014

Fast Company
The London Underground Has Its Own Internet Of Things

2011

Al-Jazeera
Hacktivism for Syria

The Atlantic
Study Finds Broad Support for Online Vigilantism (In Some Cases)

Fast Company
Occupy Sites Help Cops, Corps Track Occupiers

Service

Climate Committee, Institute for Software Research, Carnegie Mellon University, 2018-Present

Student Representative, Information Technology Committee, 2014-2015

Miscellaneous

Professional Memberships:

Association for Computing Machinery

Association of Internet Researchers

International Association of Privacy Professionals

Programming Languages (Fluent):

CSS, HTML, Javascript, LATEX, PERL, PHP, Python, Regular Expressions, Shell Scripting, SQL, XML.