

# Rebekah Overdorf, Ph.D.

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## Professional Research Experience

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- 09/2022 – ... ♦ **Assistant Professor.** University of Lausanne (UNIL).  
11/2018 – 07/2022 ♦ **Postdoctoral Researcher.** École polytechnique fédérale de Lausanne (EPFL).  
11/2017 – 11/2018 ♦ **Postdoctoral Researcher.** KU Leuven.  
09/2012 – 11/2017 ♦ **Researcher Assistant.** Drexel University.  
Supervisor: Rachel Greenstadt.

## Education

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- 2017 ♦ **Ph.D. Computer Science**, Drexel University, Philadelphia, PA, USA.  
Thesis: *Bridging Distinct Domains in Privacy Related Learning Problems*  
Supervisor: Rachel Greenstadt  
2015 ♦ **M.Sc. Computer Science**, Drexel University, Philadelphia, PA, USA.  
2012 ♦ **B.Sc. (With Honors) Computer Science, Mathematics**, Moravian College, Bethlehem, PA, USA.

## Academic Service

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Program	The Web Conference 2023
Committee	Privacy Enhancing Technologies Symposium (PETS) 2019 — 2021, 2023 USENIX Security 2021 — 2023 Workshop on Attackers and Cyber-Crime Operations (WACCO) 2019 — 2022 Symposium on Electronic Crime Research (eCrime) 2020 — 2022 European Symposium on Research in Computer Security 2021 Workshop on the Economics of Information Security (WEIS) 2020 Workshop on Privacy in the Electronic Society (WPES) 2020 Workshop on Artificial Intelligence and Security (AISec) 2019, 2020 Security and AI Networking Conference (ScAINet) 2019
Workshop	Hot Topics in Privacy Enhancing Technologies (HotPETs) 2022, 2023
Co-chair	Privacy and Ethics in Eye Tracking (PrETHics) 2022
Publicity	Privacy Enhancing Technologies Symposium (PETs) 2019 — 2022
Co-chair	

## Funding

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- Fellowship ♦ **Information Controls Fellow (2019/2020).** Open Tech Fund.  
Working with online social networking data in Central Asia to:
- Identify fake accounts
  - Identify the propaganda and disinformation they spread
  - Monitor and assess their activities
  - Understand their effect on the overall network

## Funding (continued)

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Investigator      **Harmful Information Against Humanitarian Organizations.** Science And Technology For Humanitarian Action Challenges (HAC).  
Joint project with the ICRC to address the challenges of measuring online attacks against humanitarian organizations.

## Awards

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*Best Paper Award Finalist* Conference on Computer and Communications Security, 2018

*Caspar Bowden PET award runner-up*, 2018

*HotPETs Best Talk Award*, Privacy Enhancing Technologies Symposium 2019

*HotPETs Best Talk Award*, Privacy Enhancing Technologies Symposium 2018

## Invited Talks and Panels

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Invited Panelist at Privacy Camp: Platform Resistance and Data Rights. January 26, 2021.

Invited Lecturer at Foundation of ICT for decision makers hosted by the International Committee of the Red Cross (ICRC) . November 25, 2020.

Invited Speaker at Manipulating elections in cyberspace: are democracies in danger? October 6, 2020.

Invited Panelist and Speaker at Applied Machine Learning for Social & Environmental Problems (ML4SEP). October 4, 2019.

Invited Panelist at Technical Solutions to Cybercrime at Central Asia Security Forum on Countering Extremism Online. September 13-14, 2018.

Invited Panelist on AI and Cybercrime at Council of Europe Octopus Conference. July 12-13, 2018.

The Fingerprintability of Tor Onion Services.

Invited Talk at CyberSeed, University of Connecticut. October 19, 2017.

How Unique is Your .onion? An Analysis of the Fingerprintability of Tor Onion Services.

Invited Talk at the IMDEA Software Institute. March 28, 2017.

How Unique is Your .onion? An Analysis of the Fingerprintability of Tor Onion Services.

Invited Talk at New York University. March 24, 2017.

Blogs, Comments, and Twitter Feeds: A Study of Domain Adaptation in Stylometry.

Invited Talk at Technische Universität München, July 13, 2014.

## Other

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Languages      English (Native). Spanish (Intermediate). French (Beginner).

Nationality      American.

## Research Output

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### Conference/Journal Papers

- 1 Elmas, T., Ibanez, T. R., Hutter, A., **Overdorf, R.**, & Aberer, K. (2022). Waypop machine: A wayback machine to investigate popularity and root out trolls [short paper]. *Foundations of Open Source Intelligence and Security Informatics*.
- 2 Elmas, T., **Overdorf, R.**, & Aberer, K. (2022). [Characterizing Retweet Bots: The Case of Black Market Accounts](#). *Proceedings of the International AAAI Conference on Web and Social Media*.
- 3 Elmas, T., **Overdorf, R.**, & Aberer, K. (2021b). [A Dataset of State-Censored Tweets](#) [dataset paper]. *Proceedings of the Fifteenth International AAAI Conference on Web and Social Media, ICWSM 2021*.
- 4 Elmas, T., **Overdorf, R.**, Özkalay, A. F., & Aberer, K. (2021). [Ephemeral Astroturfing Attacks: The Case of Fake Twitter Trends](#). *IEEE European Symposium on Security and Privacy, EuroS&P*.
- 5 Kulynych, B., **Overdorf, R.**, Troncoso, C., & Gürses, S. F. (2020). [POTs: protective optimization technologies](#). *FAT\* '20: Conference on Fairness, Accountability, and Transparency*.
- 6 Dauber, E., **Overdorf, R.**, & Greenstadt, R. (2017). [Stylometric authorship Attribution of Collaborative Documents](#). *Cyber Security Cryptography and Machine Learning, (CSCML)*.
- 7 **Overdorf, R.**, Juárez, M., Acar, G., Greenstadt, R., & Díaz, C. (2017). [How Unique is Your .onion?: An Analysis of the Fingerprintability of Tor Onion Services](#) [Best Paper Award Finalist, 2018 Caspar Bowden PET award runner-up]. *ACM SIGSAC Conference on Computer and Communications Security, CCS*.
- 8 **Overdorf, R.**, & Greenstadt, R. (2016). [Blogs, Twitter Feeds, and Reddit Comments: Cross-domain authorship Attribution](#). *Proceedings on Privacy Enhancing Technologies (PoPETs)*.
- 9 Garg, V., Afroz, S., **Overdorf, R.**, & Greenstadt, R. (2015). [Computer-Supported Cooperative Crime](#) [short paper]. *Financial Cryptography and Data Security (FC)*.
- 10 Stolerman, A., **Overdorf, R.**, Afroz, S., & Greenstadt, R. (2014). [Breaking the Closed-World Assumption in Stylometric authorship Attribution](#). *Advances in Digital Forensics X (IFIP WG)*.
- 11 **Overdorf, R.**, & Lang, M. (2011). [Reaching out to aid in retention: empowering undergraduate women](#). *ACM Technical Symposium on Computer science Education (SIGCSE)*.

### Unpublished Preprints

- 1 Elmas, T., **Overdorf, R.**, Akgül, Ö. F., & Aberer, K. (2020). [Misleading Repurposing on Twitter](#) [Under Submission].
- 2 **Overdorf, R.**, Troncoso, C., Greenstadt, R., & McCoy, D. (2018). [Under the Underground: Predicting Private Interactions in Underground Forums](#).

### Workshop Papers, etc.

- 1 Elmas, T., **Overdorf, R.**, & Aberer, K. (2021a). [Tactical Reframing of Online Disinformation Campaigns Against The Istanbul Convention](#). *Workshop on Data for the Wellbeing of Most Vulnerable (ICWSM Workshop)*.
- 2 Elmas, T., Hardi, K., **Overdorf, R.**, & Aberer, K. (2020). [Can Celebrities Burst Your Bubble?](#) *Innovative Ideas in Data Science (The Web Conference Workshop)*.
- 3 Schwartz, C., & **Overdorf, R.** (2020). [Disinformation from the Inside: Combining Machine Learning and Journalism to Investigate Sockpuppet Campaigns](#). *CyberSafety (The Web Conference Workshopp)*.
- 4 **Overdorf, R.**, Kulynych, B., & Gürses, S. (2019). A guide to revolutionary counter-optimization. *Internet Freedom Festival (IFF)*.

- 5 Schwartz, C., & Overdorf, R. (2019). [Subtle Censorship via Adversarial Fakeness in Kyrgyzstan](#) [HotPETs Best Talk Award]. In *Workshop on Hot Topics in Privacy Enhancing Technologies (HotPETs)*.
- 6 Gürses, S., Overdorf, R., & Balsa, E. (2018). [POTs: The revolution will not be optimized?](#) [HotPETs Best Talk Award]. *Workshop on Hot Topics in Privacy Enhancing Technologies (HotPETs)*.
- 7 Overdorf, R., Kulynych, B., Balsa, E., Troncoso, C., & Gürses, S. (2018). [Questioning the assumptions behind fairness solutions](#). *Critiquing and Correcting Trends in Machine Learning (NeurIPS Workshop)*.
- 8 Overdorf, R., Dutko, T., & Greenstadt, R. (2014). [Blogs and Twitter Feeds: A Stylometric Environmental Impact Study](#). *Workshop on Hot Topics in Privacy Enhancing Technologies (HotPETs)*.
- 9 Overdorf, R., Islam, A. C., & Greenstadt, R. (2014). [Source Code and Cross Domain Stylometry. Role of Stylometry in Privacy](#). *Chaos Communication Congress (CCC)*.