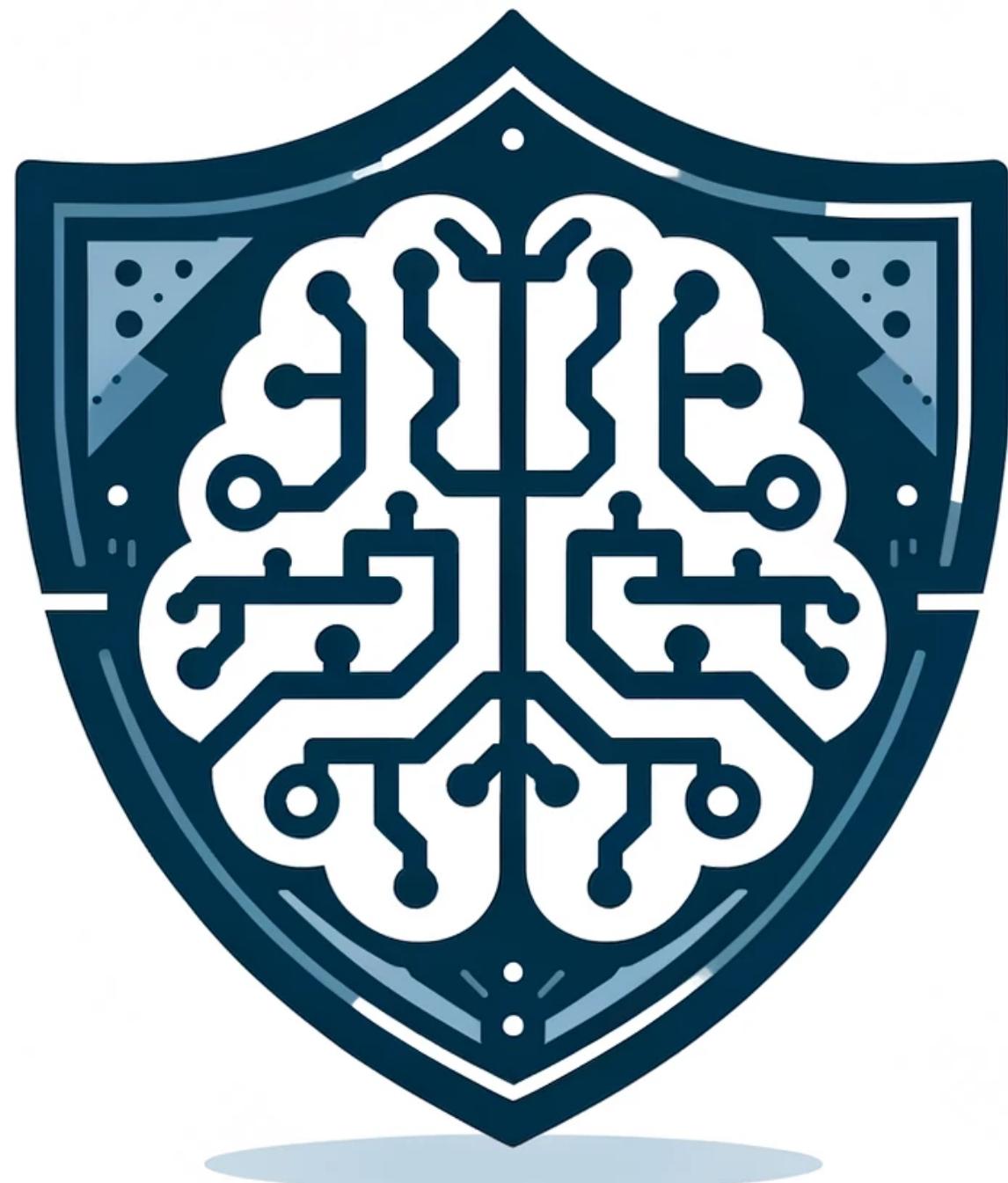




# PPAI 2025

## 6-th AAAI Workshop on Privacy-Preserving AI

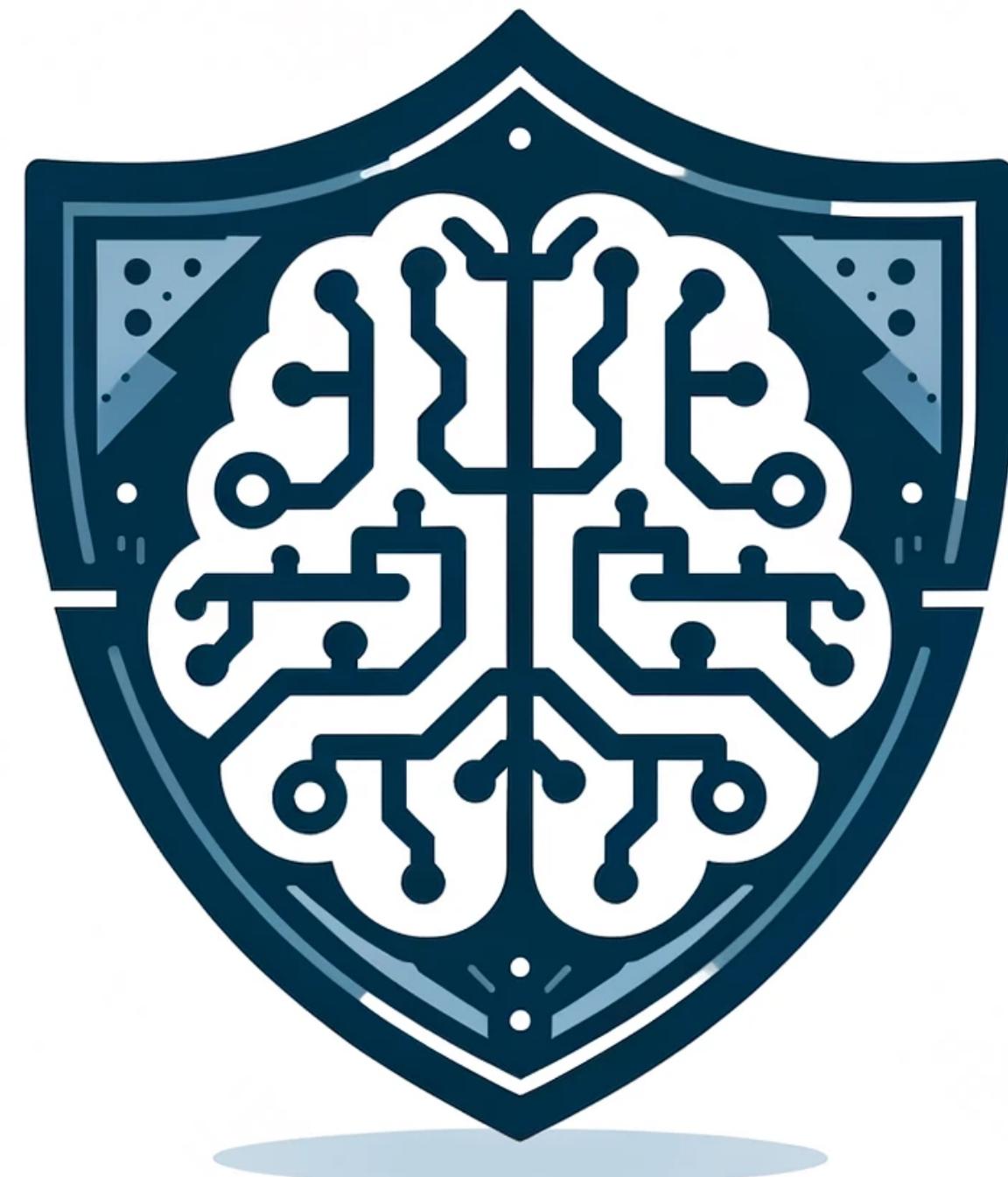


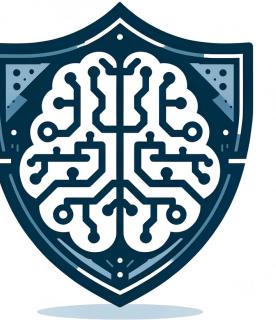


# PPAI 2025

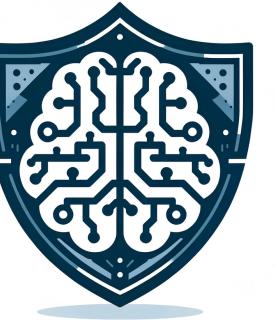
## 6-th AAAI Workshop on Privacy-Preserving AI

**Posters:**  
In front of the  
**Registration desk**





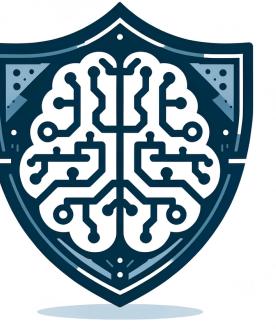
# Welcome



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- **Why PPAI ?**

Provide a multi-disciplinary platform for researchers, AI practitioners, and policymakers to focus on both theory and practice of Privacy-preserving AI systems.



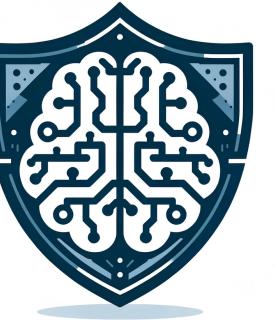
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- **Scope and Topics**

- Algorithmic approaches to protect data privacy in the context of learning, optimization, and decision making.
- Social issues related to tracking, tracing, and surveillance programs.
- **Policy considerations and legal frameworks for privacy; Broader implications of privacy in LLMs; and The societal impact of privacy within AI.**



# Welcome

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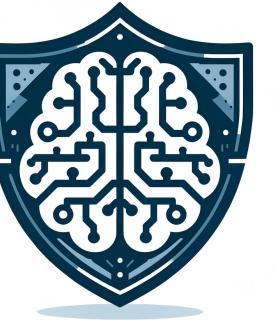
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- Social issues related to tracking, tracing, and surveillance programs.
- **Policy considerations and legal frameworks for privacy; Broader implications of privacy in LLMs; and The societal impact of privacy within AI.**

- **Submissions**

- 54 submissions: accepted — 8 orals + 36 posters



# Welcome

## Workshop Chairs

---



**Ferdinando Fioretto**

University of Virginia

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Georgia Institute of  
Technology

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**Wanrong Zhang**

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Columbia

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**Jeremy Seeman**

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Michigan

[JSeeman@urban.org](mailto:JSeeman@urban.org)

## Student Organization Committee

---



**Diptangshu Sen**

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**Saswat Das**

University of Virginia

[saswatdas@email.virginia.edu](mailto:saswatdas@email.virginia.edu)



# Program

9:00 **Invited Talk** by Aaron Roth

9:30 **Invited Talk** by Alexis Shore Ingber

10:00 **Contributed Talks**

Talk 1: *Understanding and Mitigating the Impacts of Differentially Private Census Data on State Level Redistricting*

Talk 2: *Fairness Issues and Mitigations in (Private) Socio-demographic Data Processes*

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Talk 4: *Hacking the CRC Archive: Evaluating empirical privacy metrics on deidentified data*

10:30 **Break**

11:00 **Contributed Talks**

Talk 5: *LLM on the wall, who \*now\*, is the appropriate one of all?": Contextual Integrity Evaluation of LLMs*

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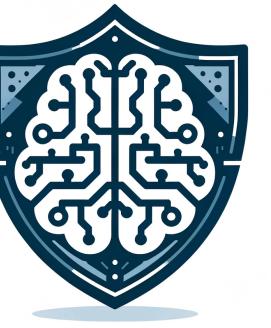
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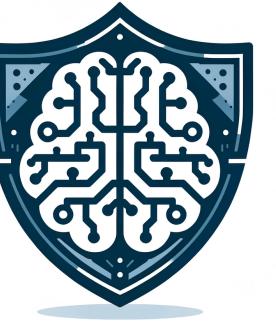


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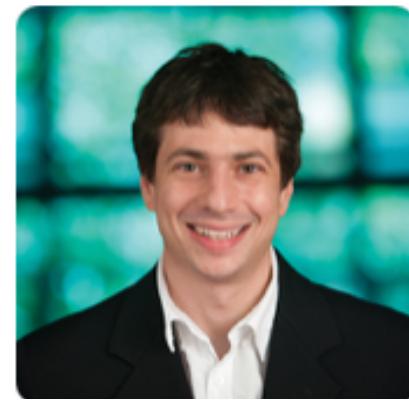


**Aaron Roth**  
University of  
Pennsylvania



# Program

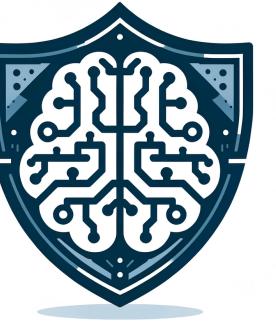
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**Aaron Roth**  
University of Pennsylvania

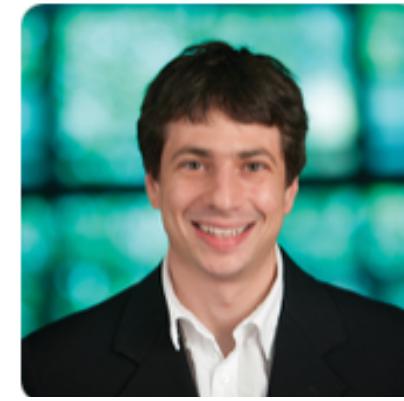


**Alexis Shore Ingber**  
University of Michigan



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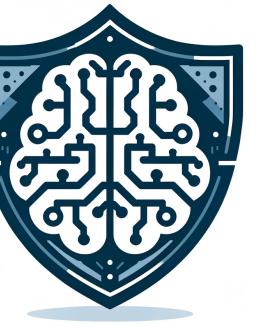
**Aaron Roth**  
University of Pennsylvania



**Alexis Shore Ingber**  
University of Michigan



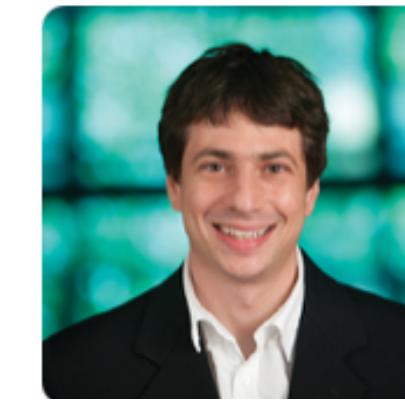
**Eugene Bagdasarian**  
University of Massachusetts, Amherst



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University of Pennsylvania



**Alexis Shore Ingber**  
University of Michigan



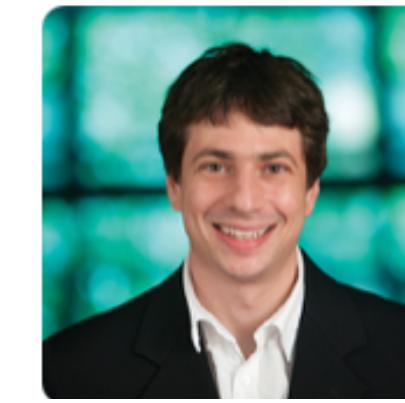
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University of Pennsylvania



**Alexis Shore Ingber**  
University of Michigan



**Eugene Bagdasarian**  
University of Massachusetts, Amherst



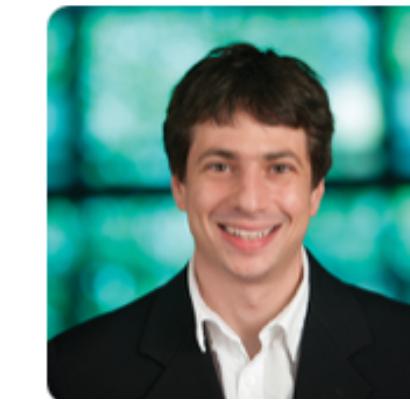
**Amy Cyphert**  
West Virginia University



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**Aaron Roth**

University of  
Pennsylvania



**Alexis Shore Ingber**

University of Michigan



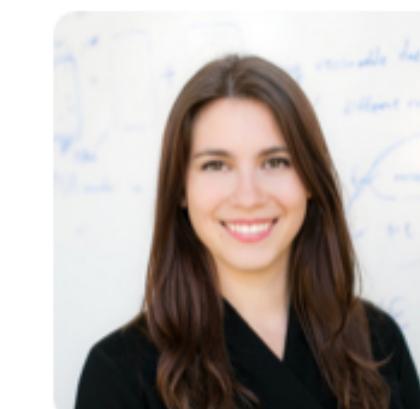
**Eugene  
Bagdasarian**

University of  
Massachusetts, Amherst



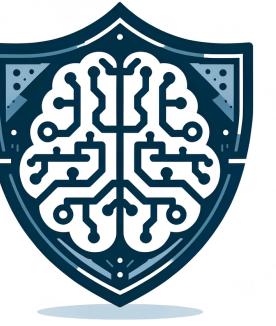
**Amy Cyphert**

West Virginia University



**Rachel Cummings**

Columbia University

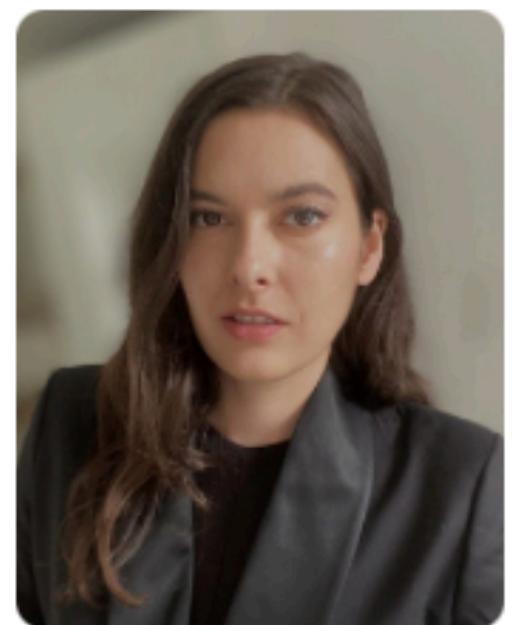


# Program 3:15PM

## PPAI-25 Panel:

**“Understanding and regulating the privacy risks in an embodied agents world”**

---



**Annette  
Zimmermann**  
University of Wisconsin-  
Madison



**Laurn P. Gouldin**  
Syracuse University



**Eugene  
Bagdasarian**  
University of  
Massachusetts, Amherst



**Aloni Cohen**  
University of Chicago

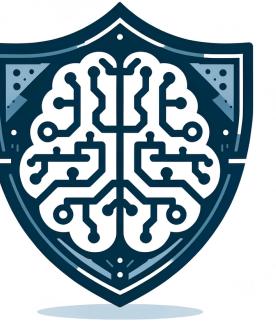
# A bit of shameless ad

## Contributing Authors

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<b>James Anderson</b> Columbia University	<b>Marzyeh Ghassemi</b> Massachusetts Institute of Technology
<b>Kallista Bonawitz</b> Google Research	<b>Bryant Gipson</b> Google
<b>Konstantinos Chatzikokolakis</b> University of Athens	<b>Anna Goldenberg</b> University of Toronto
<b>Giovanni Cherubin</b> Microsoft Research	<b>Michael Hay</b> Tumult Labs and Colgate University
<b>Graham Cormode</b> University of Warwick	<b>Peter Kairouz</b> Google Research
<b>Rachel Cummings</b> Columbia University	<b>Steven H. Low</b> California Institute of Technology
<b>Damien Desfontaines</b> Tumult Labs	<b>Ashwin Machanavajjhala</b> Tumult Labs and Duke University
<b>Liyue Fan</b> University of North Carolina at Charlotte	<b>Brendan McMahan</b> Google Research
<b>Ferdinando Fioretto</b> University of Virginia	<b>Catuscia Palamidessi</b> Inria and École Polytechnique
<b>Marco Gaboardi</b> Boston University	<b>Nicolas Papernot</b> University of Toronto and Vector Institute
<b>David Pujol</b> Tumult Labs	<b>Christine Task</b> Knexus Research
<b>Reza Shokri</b> National University of Singapore	<b>Andreas Terzis</b> Google
<b>Jeremy Seeman</b> Urban Institute	<b>Abhradeep Thakurta</b> Google Deepmind
<b>Thomas Steinke</b> Google DeepMind	<b>Salil Vadhan</b> Harvard University
<b>Vinith M. Suriyakumar</b> Massachusetts Institute of Technology	<b>Pascal Van Hentenryck</b> Georgia Institute of Technology
<b>Yurii Sushko</b> Goolge	<b>Jiayuan Ye</b> National University of Singapore
<b>Yuchao Tao</b> Snap Inc	<b>Fengyu Zhou</b> California Institute of Technology
	<b>Juba Ziani</b> Georgia Institute of Technology



# Student sponsorship

We will be able to provide several student scholarships!

**Diamond**

**Google**  
**Deloitte.**

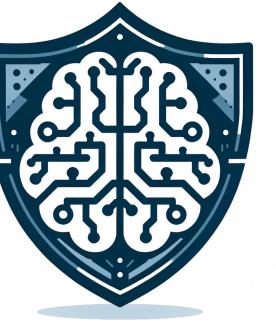
**Thank you!!**

**Gold**



**Silver**





# Student sponsorship

We will be able to provide several student scholarships!

Diamond

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Gold

## Career Opportunities:

If you'd like to hear about available opportunities from our sponsors, please fill out the form on the PPAI website

<https://ppai-workshop.github.io/>



OpenDP

Thank you!!

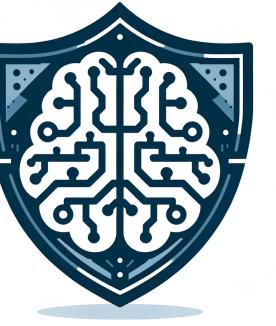


# Thank You!

## Program committee

Alyssa	Columbus	Johns Hopkins University
Amin	Rahimian	University of Pittsburgh
Anshuman	Suri	University of Virginia
Antti	Koskela	Nokia Bell Labs
Aurv@lien	Bellet	INRIA
Bishnu	Bhusal	University of Missouri
Catuscia	Palamidessi	Laboratoire d'informatique de l'École polytechnique
Difang	Huang	University of Hong Kong
Diptangshu	Sen	Georgia Institute of Technology
Edo	Roth	Google
Ejaz	Ahmed	School of Public Policy, Georgia Tech
Fan	Mo	Imperial College London
Ferdinando	Fioretto	University of Virginia
Gharib	Gharibi	TripleBlind.ai
Graham	Cormode	University of Warwick
Hongyan	Chang	NUS
James	Flemings	University of Southern California
Jeremy	Seeman	Urban Institute
Joonas	Juuso	University of Helsinki
Juba	Ziani	Georgia Tech
Kobbi	Nissim	Georgetown University
Krishna	Acharya	Georgia Institute of Technology
Krystal	Maughan	University of Vermont
Ludmila	Glinskikh	Google

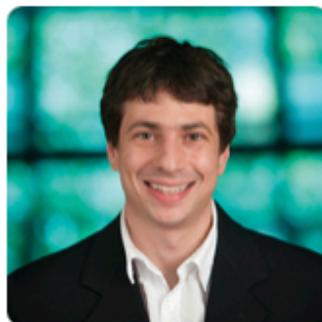
Manel	Slokom	CWI
Marco	Romanelli	Hofstra University
Moshe	Shenfeld	Hebrew University
Pierre	Tholoniat	Columbia University
Prajwal	Panzade	Old Dominion University
Pratiksha	Thaker	Carnegie Mellon University
Rakshit	Naidu	Georgia Institute of Technology
Ranya	Aloufi	Imperial College London
Rojin	Rezvan	University of Wisconsin-Madison
Rola	Alseidi	Philadelphia University
Rui-Jie	Yew	Brown University
Sandeep	Silwal	University of Wisconsin-Madison
Sandro	Radovanovic	University of Belgrade
Sankarshan	Damle	EPFL
Saswat	Das	University of Virginia
Shahnewaz Karim	Sakib	The University of Tennessee at Chattanooga
Stacey	Truex	Denison University
Tianhao	Li	Duke University
Tianhao	Wang	University of Virginia
Vahid	Behzadan	University of New Haven
Vasanta	Chaganti	Swarthmore College
Xi	He	University of Waterloo
Yeojoon	Youn	Georgia Institute of Technology
Yidi	Xu	University of Pennsylvania
Yifan	Liu	Georgia Tech



# Thank You!

## Invited Speakers

---



**Aaron Roth**  
University of Pennsylvania



**Rachel Cummings**  
Columbia University



**Amy Cyphert**  
West Virginia University



**Alexis Shore Ingber**  
University of Michigan



**Eugene Bagdasarian**  
University of Massachusetts,  
Amherst

## Panelists

---



**Annette Zimmermann**  
University of Wisconsin-Madison



**Lauryn P. Gouldin**  
Syracuse University

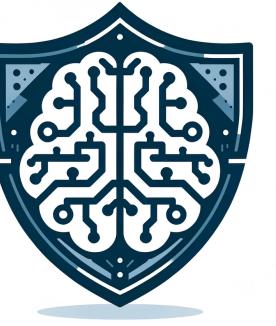


**Eugene Bagdasarian**  
University of Massachusetts,  
Amherst



**Aloni Cohen**  
University of Chicago

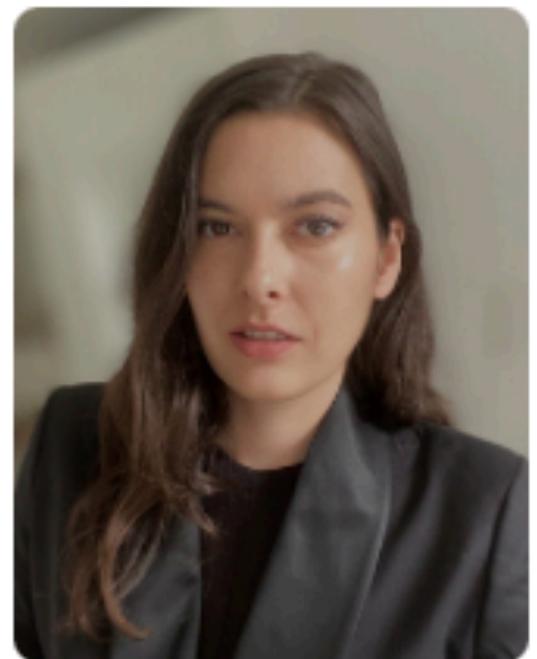
Big Thanks to all the workshop participants!



# PPAI-25 Panel

**"Understanding and regulating the privacy risks in an embodied agents world"**

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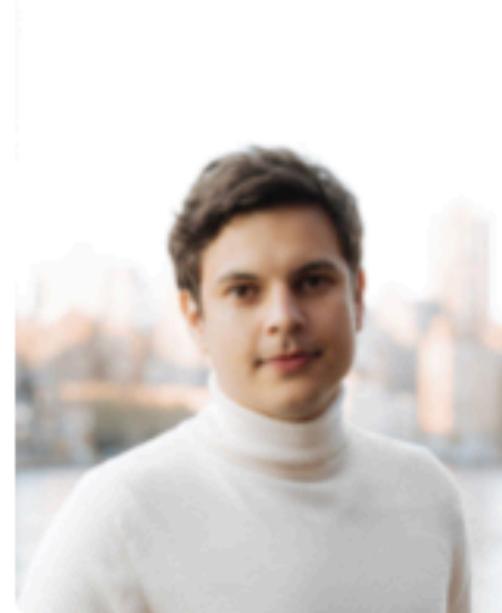
**Annette Zimmermann**

University of Wisconsin-Madison



**Lauryn P. Gouldin**

Syracuse University



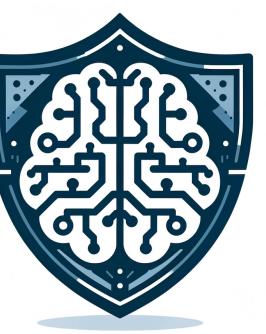
**Eugene Bagdasarian**

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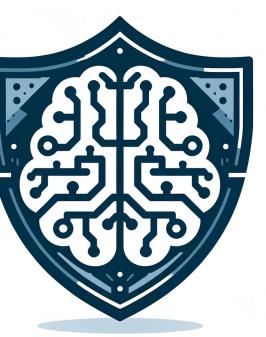
# Scenario

Consider a robotic agents deployed to "observe" individuals (e.g., skilled workers at work, children at play, or by-standing) to collect data such as personal behaviors, location data, and "skills", which are later pooled to improve machine learning models.

Similar scenarios can be pictured for personal assistant agents.

- **home assistant agents** (either embodied or not) that are designed to learn user habits to improve service quality but inadvertently record sensitive conversations and personal routines.
- **medicine** and real-life symptom tracking and monitoring + automated treatment and symptom management + personalized health recommendations.





# Scenario

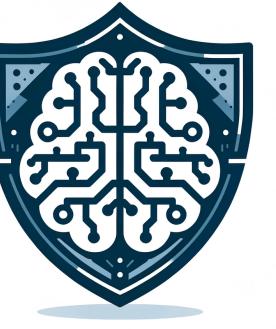
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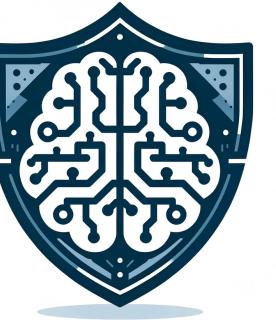
**Issue:** This data might is not only sensitive on its own, but could even be shared with third-party developers for training commercial models.





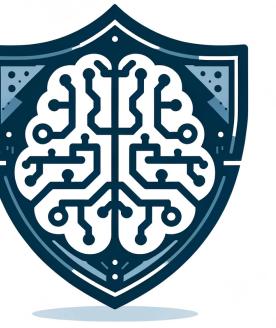
# Technical focus

1. - Current privacy techniques are likely insufficient today for such large scale, dynamic, and multi-modal data. What is missing and how do we get there?
2. - What metrics and auditing techniques can we develop to quantify the privacy risk of such data collection?
3. - How do we even measure the privacy risk in these settings (e.g., multimodal data)?



# Policy / Legal focus

1. Current regulatory frameworks are likely not be sufficient for these privacy concerns. What are we missing and how do we get there?
2. what do you think is the role of consent when it comes to scrapping and subtle data collection?
3. Assume a privacy break arises (an LLM leaks some sensitive user information). Where does the responsibility lie?
4. How do we establish clear guidelines for data retention and post-violation remedies?



# Closing remarks

## 1. Panel Discussion

1. A
2. B
3. C



# The 6th AAAI Workshop on Privacy-Preserving Artificial Intelligence (PPAI 2025)

**PPAI will resume at 2:45 PM**

**(Poster session now!)  
By the registration desk**

