Privacy Engineering:
Towards a definition
Gap between research and practice

Privacy (research)
- Theories
- Paradigms
- Frameworks
- Threats and risks
- Technologies

(Software) engineering
- Development process
- Business domain
- System type

Privacy by Design

Privacy Engineering
Field of research and practice that designs, implements, adapts, and evaluates theories, methods, techniques, and tools to systematically capture and address privacy issues when developing information systems.

Seda Gürses & Jose M. del Alamo
Privacy Engineering: Shaping an Emerging Field of Research and Practice
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**Theory:** Privacy conceptualization

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**GDPR**
EU General Data Protection Regulation
Field of research and practice that designs, implements, adapts, and evaluates theories, *methods*, techniques, and tools to systematically capture and address privacy issues when developing information systems.

**Method:** Process description providing directions and rules and helping to set privacy goals, structured in a systematic way in tasks and stages.
Privacy Engineering

Field of research and practice that designs, implements, adapts, and evaluates theories, methods, techniques, and tools to systematically capture and address privacy issues when developing information systems.

**Technique:** Procedures, possibly with a prescribed language or notation, to accomplish specific privacy-engineering tasks.

T. Breaux et al., *Eddy, a formal language for specifying and analyzing data flow specifications for conflicting privacy requirements*.
Field of research and practice that designs, implements, adapts, and evaluates theories, methods, techniques, and tools to systematically capture and address privacy issues when developing information systems.

**Tools:** Means (automated or not) that support privacy engineers to carry out their responsibilities within a privacy-engineering method.
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**Method engineering:** Engineering discipline to design, construct and adapt methods, techniques and tools for the development of information systems


**Situational method engineering:** Design new methods tuned to the project at hand departing from existing method parts or elements.
Next steps

**Identify method chunks for privacy engineering**
- PRIPARE
- International Workshop on Privacy Engineering
- Privacy Engineering Community

**Contribute to ISO/IEC NP 21876: Privacy Engineering**
THANK YOU!!

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3rd IEEE International Workshop on Privacy Engineering
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