

Second International Workshop on Privacy Engineering IWPE'16

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MAY 26, 2016



Why are we here today?

EU General Data Protection Regulation

- Data Protection Impact Assessment
- Data Protection by Design and by Default
- Strengthens individual rights, increases responsibility of data controllers
 - Corporate sanctions or fines up to **4% of annual worldwide turnover or 20€M** for non-compliance
 - Burden of proof on the data controller, not the user

Why are we here today?





Existing Initiatives

MITRE



NIST



OASIS

W3C[®]





Privacy Engineering Field

Integrating law and policy compliance into the development process

Privacy impact assessment during software development

Privacy risk management models

Privacy breach recovery methods

Technical standards, heuristics and best practices for privacy engineering

Privacy engineering in technical standards

Privacy requirements elicitation and analysis methods

User privacy and data protection requirements

Management of privacy requirements with other system requirements

Privacy requirements implementation

Privacy engineering strategies and design patterns

Privacy-preserving architectures

Privacy engineering and databases

Privacy engineering in the context of interaction design and usability

Privacy testing and evaluation methods

Validation and verification of privacy requirements

Engineering Privacy Enhancing Technologies (PETs)

Integration of PETs into systems

Models and approaches for the verification of privacy properties

Tools and formal languages supporting privacy engineering

Teaching and training privacy engineering

Adaptations of privacy engineering into specific software development processes

Pilots and real-world applications

Evaluation of privacy engineering methods, technologies and tools

Privacy engineering and accountability

Privacy engineering and business processes

Privacy engineering and manageability of data

Organizational, legal, political and economic aspects of privacy engineering



Privacy Engineering @IWPE

Controlled
security
Generation dataset
TPAs paper
critical Things
provided more differential
Natural great scientific
legal address framework Tags
technical Social transparency
proposed set practical present
patterns friendly users optimality STPA OSN applied rules
Directive providing practice provide results
strategies way query feared
oblivious Impact about OSNs risks
between System-Theoretic all questions
approach protection development ii propose
Language harms study automatically need risk
existing use
information policies particular formal
engineering handling mechanisms

questionnaire
Applications
Assessment personal process
data access DPD
analysis
widespread order
concepts given events
tools model database
provide results
systems
argue
EU European
important requirements

privacy

data

policy

design



Workshop Facts

- 37 PC members
 - 17 submissions
 - 60% from Europe
 - 40% from USA
 - 9 accepted papers
 - 3 short papers
 - 6 regular papers
 - 45+ registered
- **48 PC members**
 - **21 submissions**
 - **48% from Europe**
 - **39% from USA**
 - **India, Israel, Turkey**
 - **9 accepted papers**
 - **2 short papers**
 - **7 regular papers**
 - **50+ registered**



Agenda

8:45-9:00	Opening remarks
9:00-9:15	Privacy Engineering: Shaping an Emerging Field of Research and Practice
9:15-10:15	Privacy and Algorithmic Accountability: Theory and Practice
10:15-10:45	Coffee Break
10:45-12:25	Session 1: Privacy engineering tools
12:25-12:30	Best paper award
12:30-1:30	Lunch
1:30-2:20	Session 2: Privacy engineering techniques
2:20-3:15	Panel: Tools in support of privacy engineering techniques
3:15-3:45	Coffee Break
3:45-4:50	Session 3: Privacy engineering methodologies
4:50-5:45	Panel: Tools in support of privacy engineering methodologies



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