

# Elena Pagnin

Associate Senior Lecturer at  
Lund University

## Personal Info

Birthdate: 15.05.1989  
Nationality: Italian  
Driving: B  
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Profiles: Google Scholar, LinkedIn

## Impact

No. publications: **16**  
No. citations: **163** (Google Scholar)  
h-index: **7** (Google Scholar)

## Languages

**Italian:** Mother tongue (C2)  
**English:** Fluent (C1)  
**Spanish:** Fluent (B2)  
**Swedish:** Intermediate (B1)  
**German:** Basic (A2)

## Hobbies

Martial arts, traveling, hiking, cooking,  
photography, theater, music, sailing.

## Education & Titles

2020 - now	<b>Associate Senior Lecturer</b> (Biträdande Universitetslektor)	Lund University (SE)
2019 - 2020	<b>Post-Doctoral Researcher</b> in Cryptography	Aarhus University (DK)
2014 - 2019 (early defence on 07.09.2018)	<b>Ph.D.</b> in Computer Science (Cryptography) <i>Supervisors: A. Sabelfeld &amp; D. Fiore (IMDEA)</i>	Chalmers University of Technology, Gothenburg (SE)
25.08.2016	<b>Licentiate</b> Degree of Engineering <i>Supervisors: A. Mitrokotsa &amp; D. Fiore (IMDEA)</i>	Chalmers (SE)
2012-2013	<b>Project Officer</b> (paid researcher assistant position)	Nanyang Tech. Univ. (SG)
2011-2013	<b>Masters in Applied Mathematics</b> Score: <b>110 / 110, cum laude</b>	University of Trento (IT)
2008-2011	<b>Bachelor Degree in Pure Mathematics</b>	University of Padova (IT)

## Achievements, Grants & Awards

2020	<b>Best Paper Award</b> for <i>Multi-Key Homomorphic Authenticators</i> (Fiore, Mitrokotsa, Nizzardo, Pagnin)	IET Information Security Journal
2020-2022	Strategic research area <b>ELLIIT personal grant</b> (1.6M SEK)	Lund University (SE)
2015-2017	Four <b>Short Term Scientific Missions (STSM)</b> funded by e-COST Actions IC1306 and 1403	IMDEA, ETH, Xlim/Limoges
2015	Japanese Society for Promotion of Science ( <b>JSPS</b> ) <b>Summer Program Fellow</b> at Prof. Tanaka lab	TokyoTech (JP)
2014	<b>"Premio di Merito"</b> award for merits given to students who achieved stellar results in their masters	University of Trento (IT)

## Professional Activities

### Assignments as public examiner/opponent/evaluator

2019 **Examiner** for the PhD Defence of *Ijlal Loutfi* on "Trusted Execution on Commodity Devices" University of Oslo (NO)

### Board Member of University Associations

2019-2020 **Board Member of ALICE** (alliance for women in IT, computing and engineering at Aarhus University) Aarhus University (DK)  
2017-2018 **Elected Member of the PhD Council** at the department of Computer Science and Engineering Chalmers (SE)

### Popular Science Presentations

2020 **Invited Speaker** at 'AI, digitalisering och integritet – vad får vi för vår hälsodata?' Lund (SE)  
2018 **Invited Speaker** at Göteborgs Vetenskapsfestivalen Gothenburg (SE)

### Conference - Workshop Organisation

2021 Member of the **Program Committee** of ACISP-2021 Perth (AU)  
2018 Member of the **Local and Organising Committee** of CANS-2018 Naples (IT)

### (Sub)Reviewer

**Journals** | Computer Journal, IET Information Security, IEEE Comm. Letters.  
**Conferences** | SCN20, CCS19, AsiaCrypt19, POST18, iFM17, IndoCrypt16, ESORICS16, Infocom15.

## Supervision of PhD Students

2020 - 2022	<b>Joakim Brorsson</b> topic: <i>Privacy Enhancing Technologies</i> (main supervisor M. Hell)	Lund University (SE)
2020 - 2025	<b>Rohon Kundu</b> topic: <i>Fully Homomorphic Encryption from Number Theoretic Assumptions</i> (M. Hell)	Lund University (SE)
2020 - 2022	<b>Hadi Sehat</b> topic: <i>Efficient &amp; Private Cloud Storage Solutions</i> (D. Lucani)	Aarhus University (DK)
2019 - 2024	<b>Ivan Oleynikov</b> topic: <i>Privacy-Preserving Location Proximity Testing</i> (A. Sabelfeld)	Chalmers (SE)

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## Main, Recent Publications

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<b>IEEE ICC</b>	Sehat, Lucani, and Pagnin, "Yggdrasil: Privacy-Aware Dual Deduplication in Multi Client Settings", 2021.
<b>SCN</b>	Lucani, Nielsen, Orlandi, Pagnin, and Vestergaard, "Secure Generalized Deduplication via Multi-Key Revealing Encryption", 2020.
<b>ESORICS</b>	Oleynikov, Pagnin, and Sabelfeld, "Where Are You Bob? Privacy-Preserving Proximity Testing with a Napping Party", 2020.
<b>IET IS</b>	Fiore, Mitrokotsa, Nizzardo, and Pagnin, "Multi-key Homomorphic Authenticators", 2019.
<b>LatinCrypt</b>	Aranha and Pagnin, "The Simplest Multi-key Linearly Homomorphic Signature Scheme", 2019.
<b>EuroS&amp;P</b>	Blazy, Bossuat, Bultel, Fouque, Onete, and Pagnin, "SAID: Reshaping Signal into an Identity-Based Asynchronous Messaging Protocol with Authenticated Ratcheting", 2019.
<b>SCN</b>	Fiore and Pagnin, "Matrioska: A Compiler for Multi-key Homomorphic Signatures", 2018.

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## Teaching Experience

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2016-2017	<b>Lecturer and Instructor</b> for the Master level course <i>Advanced Web Security</i> (EITN41, 7.5hp)	Lund University (SE)
2020-now	<b>Supervisor of Master Theses Projects</b> Anton Jeppsson <i>Private Set Intersection via Fully Homomorphic Encryption</i>	Lund University (SE)
2014-2018	<b>Supervisor of 5 Master Theses</b> Lamiya Yagublu <i>Explaining the Signal protocol</i> (2018), Anders Stigsson <i>Taxonomy of quantum algorithms</i> (2018), Emilie Widegren <i>FHE: a case of study</i> (2017), Elena Fuentes Bongenaar <i>Multi-key homomorphic encryption</i> (2016), Jing Liu <i>Verifiable delegation of computation in the setting of privacy-preserving biometric authentication</i> (2015)	Chalmers (SE)
2016-2017	<b>Lecturer and Instructor</b> for the Master level course <i>Cryptography</i> (TDA352/DIT250, 7.5hp)	Chalmers (SE)
2014-2018	<b>Teaching Assistant</b> <i>Cryptography, Algorithms, Design and development of embedded systems, Technical writing, Programutveckling</i>	Chalmers (SE)
2013-2014	<b>Teaching Assistant</b> for the courses <i>Geometry I</i> (Bsc Mathematics) and <i>Mathematics</i> (Bsc Chemistry)	University of Padova (IT)