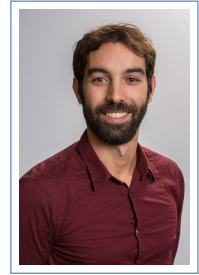


# Luca Melis

## Curriculum Vitae

Computer Science Dept,  
University College London  
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📄 [lucamelis.github.io](https://lucamelis.github.io)



### Education

- September 2014–Present **PhD in Privacy Enhancing Technologies**, under the supervision of Dr. Emiliano De Cristofaro and Dr. George Danezis, University College of London.
- April 2013 **Master's Degree in Computer Engineering**, University of Florence, mark 110/110 cum laude and honorable mention.  
Thesis: On the Learning Parity with Noise Problem
- April 2010 **Bachelor's Degree in Computer Engineering**, University of Florence, mark 110/110 cum laude.  
Thesis: Implementation of a Buyer-Seller protocol based on group signatures

### Research interests

- Machine Learning in Privacy and Security
- Privacy and Applied Cryptography
- Systems and Network Security

### Visits/Internships

- June –August 2017 **Applied Scientist Intern**, AMAZON AWS AI, New York City, USA.  
Research on Security and Deep Learning.
- September 2016–May 2017 **Enrichment Year Position**, ALAN TURING YEAR INSTITUTE, London, UK.  
Research on Privacy and Machine Learning.
- September–December 2015 **PhD Intern**, INRIA RHONE ALPES, Grenoble, France.  
Research on Deep Learning applied to Differential Privacy and social networks de-anonymization under the supervision of Dr. Claude Castelluccia.
- August 2012–January 2013 **EU Erasmus**, AARHUS UNIVERSITY, Aarhus, Denmark.  
Master's thesis preparation under the supervision of Claudio Orlandi and Ivan Damgård;  
Research on post quantum cryptography.

### Peer-reviewed Publications

- 2017 Acs, Gergely et al. "Differentially Private Mixture of Generative Neural Networks". In: *IEEE International Conference on Data Mining series (ICDM 2017)*.

- 2016 Asghar, Hassan Jameel et al. "SplitBox: Toward Efficient Private Network Function Virtualization". In: *ACM SIGCOMM Workshop on Hot Topics in Middleboxes and Network Function Virtualization (HotMiddleBox 2016)*.
- Melis, Luca, Hassan Jameel Asghar, et al. "Private Processing of Outsourced Network Functions: Feasibility and Constructions." In: *ACM Workshop on SDN-NFV Security 2016*.
- Melis, Luca, George Danezis, and Emiliano De Cristofaro. "Efficient Private Statistics with Succinct Sketches". In: *Network and Distributed System Security Symposium (NDSS 2016)*.

## Peer Reviewing for Scientific Conferences and Journals

- 2017 CCS, NDSS, PETS  
 2016 NDSS, NIPS, PETS  
 2015 S&P

## Schools/Workshops Attended

February 2017	7th BIU Winter School on Cryptography – Differential Privacy	Tel Aviv, Israel
May 2016	Theory and Practice of Secure Multiparty Computation	Aarhus, Denmark
April 2016	Google's 1st PhD Student Summit on Web Application Security	Google Munich, Germany
September 2015	School on Foundations of Security Analysis and Design (FOSAD)	Bertinoro, Italy
January 2015	Privaski Workshop 2015	Correncon, France
January 2015	Real World Cryptography Workshop 2015	London, United Kingdom
October 2014	IACR CryptoAction School on Cryptographic Attacks	Porto, Portugal
August 2011	Computational Nanotechnology Summer School	Gdansk University of Technology, Poland

## Teaching experience

- Teaching Assistant **Privacy Enhancing Technologies**, MSc IN INFORMATION SECURITY, University College London, Winter 2015, Winter 2016.
- Teaching Assistant **Publishing Scientific Papers with LaTeX/BibTex**, DOCTORAL SKILLS DEVELOPMENT PROGRAMME, University College London, Winter 2015.

## Talks

- August 2017 **Privacy Preserving Generative Neural Networks**, Amazon AI Learning Sessions, New York City, USA.
- August 2016 **SplitBox: Toward Efficient Private Network Function Virtualization**, SIGCOMM Workshop on Hot Topics in Middleboxes and Network Function Virtualization, Florianopolis, Brazil.

- February 2016 **Efficient Private Statistics with Succinct Sketches**, *23rd Network and Distributed System Security Symposium (NDSS 2016)*, San Diego, USA.
- February 2016 **Efficient Private Statistics with Succinct Sketches**, *Information Security Seminar at University College London*, London, UK.
- November 2015 **Efficient Private Statistics with Succinct Sketches**, *INRIA Rhône-Alpes*, Grenoble, France.

## Work experience

- November 2013–August 2014 **Software Test Engineer Level II**, GAMING LABORATORIES INTERNATIONAL (GLI), Bologna, Italy.
- July–October 2013 **Computer Vision researcher**, T3LAB, Bologna, Italy.
- May–June 2013 **Business Intelligence consultant**, ICONSULTING S.P.A., Bologna, Italy.

## Awards

- July 2017 **5th Data Protection by Design Award, issued by the Catalan Data Protection authority and the Parliament of Catalonia, 1st Place.**  
The international award is appointed by The Catalan Data Protection Authority to give recognition to technological solutions that make a relevant contribution to the protection of privacy in the design of applications. The award was assigned for the paper "Efficient Private Statistics with Succinct Sketches" presented at NDSS 2016.
- June 2015 **London CyberHack 2015 – Fintech Security, 1st Place - Best Go-To-Market Strategy.**  
We designed and implemented a web application for preventing invoice fraud. In this project, I worked in a team of 4 people and I was responsible for the front-end development
- July 2014 **UCL Studentship for postgraduate work in the Department Computer Science.**  
The Departmental Studentship award covers tuition fees , research costs and stipends for 3 years and 6 months.

## Language skills

- Italian    Mothertongue
- English    Fluent                      *Level C1, TOEFL internet based test with a score of 98 out of 120 (2014)*

## Computer skills and competences

- Languages    C/C++, SQL, Java, JavaScript, Python, Scala

London, September 13, 2017