

# David Froelicher



## 3<sup>rd</sup> year Ph.D. candidate at EPFL

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### Summary

- 3<sup>rd</sup> year Ph.D. candidate at EPFL
- Passionate researcher in decentralized systems, applied crypto and privacy-enhancing technologies
- Excellent communicator (English: Full proficiency; French: Mother tongue; German: B1)
- Good programming skills (GoLang, Java, C, Python, Scala, Matlab, Latex)

### Experience

2016 - Today	<b>PHD at EPFL, Lausanne, Switzerland</b> <i>Laboratory for communications and applications (LCA1) and Decentralized and Distributed Systems Lab (DeDiS)</i>
2016	<b>Research Assistant at EPFL, Lausanne, Switzerland</b> <i>Laboratory for communications and applications (LCA1)</i>
2015-2016	<b>Master Thesis in NEC Laboratories Europe, Heidelberg, Germany</b> <i>Analysis of Security Primitives for Public Clouds. Implementing Proofs of Retrievability in Deduplicated Storage Systems.</i>
2014	<b>Peer-to-peer infrastructure with a Map Reduce API</b> <i>Implement a peer-to-peer network in order to use it without configuration to do Map Reduce computations</i>
2013-2014	<b>Master project at EPFL</b> : <i>In collaboration with an History Museum, we had to implement a database (MySQL) and display the results on Google Earth. We were then able to move and select on the map by using a Kinect in order to show the result. We used Google Earth API and Kinect API</i>

### Formation

2014 - 2016	<b>Ecole Polytechnique Fédérale de Lausanne</b> , Master of engineering in communication systems specialised in IT security
2010 - 2014	<b>Ecole Polytechnique Fédérale de Lausanne</b> , Bachelor of engineering in communication systems
2007 - 2010	<b>Gymnase de Morges</b> , Certificat de maturité (avec maths niveau renforcé)
1998 – 2007	<b>Collège d'Aubonne</b> , Certificat études secondaires

### Main Projects

2018 – Today	<b>DPPH: Data Protection in Personalized Health</b> Personalized Medicine, Personalized Health Research Project funded by the Strategic Focus Area Personalized Health and Related Technologies (PHRT) of the ETH Board <i>Academic partners:</i> Fellay Group (EPFL), DeDiS (EPFL), LCA1 (EPFL), GR-JET (EPFL), Health Ethics and Policy (ETH) <i>Industrial partners:</i> SDSC <i>Budget:</i> CHF 3M
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### Other Activities

2018 - Today	<b>External Reviewer for Privacy Enhancing Technologies Symposium 2019</b>
2018 - Today	<b>Reviewer for Digital Signal Processing Journal</b>
2017 - Today	<b>Reviewer for EURASIP Journal on Information Security</b>

2015

Reviewer for the ICISSP conference 2016

*International Conference on Information Systems Security and Privacy* ([www.icissp.org](http://www.icissp.org))

## Publications List

**David Froelicher**, Patricia Egger, Joao Sa Sousa, Jean Louis Raisaro, Zhicong Huang, Christian Mouchet, Bryan Ford, and Jean-Pierre Hubaux. Unlynx: a decentralized system for privacy-conscious data sharing. *Proceedings on Privacy Enhancing Technologies*, 2017(4):232– 250, 2017.

Frederik Armknecht, Jens-Matthias Bohli, **David Froelicher** and Ghassan Karame. SPORT: Sharing Proofs of Retrievability across Tenants. *Proceedings of the 2017 ACM on Asia Conference on Computer and Communications Security*, pages 275-287, 2017.

## Recreation

Football, tennis, uni-hockey, cycling, ski, Guitar, travels, reading, movies