

Elisaweta Masserova

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EDUCATION

- 2018 – ongoing Ph.D. Student: Computer Science Department
Coadvised by Vipul Goyal and Bryan Parno
Carnegie Mellon University
- 2016 – 2019 Master studies: Informatics
Karlsruhe Institute of Technology
- 2013 – 2018 Bachelor studies: Mathematics
Karlsruhe Institute of Technology
- 2011 – 2016 Bachelor studies: Informatics
Karlsruhe Institute of Technology

PUBLICATIONS

- 2021 Blockchains Enable Non-Interactive MPC
Vipul Goyal, Elisaweta Masserova, Bryan Parno, Yifan Song
- TCC 2021
 - <https://eprint.iacr.org/2021/1233>
- 2020 Fast Batched DPSS and its Applications
Vipul Goyal, Abhiram Kothapalli, Elisaweta Masserova, Bryan Parno, Yifan Song
- PKC 2022
 - <https://eprint.iacr.org/2020/504>
- 2020 Poppins: A Direct Construction for Asymptotically Optimal zkSNARKs
Abhiram Kothapalli, Elisaweta Masserova, Bryan Parno
- Cryptology ePrint Archive, Report 2020/1318
 - <https://eprint.iacr.org/2020/1318>
- 2020 Talek: Private Group Messaging with Hidden Access Patterns
Raymond Cheng, William Scott, Elisaweta Masserova, Irene Zhang, Vipul Goyal, Thomas Anderson, Arvind Krishnamurthy, Bryan Parno
- ACSAC 2020
 - <https://eprint.iacr.org/2020/066>
- 2018 Rerandomizing Oblivious Transfer for Online Oblivious Bingo Voting
Master thesis, Advisors: Prof. Müller-Quade, Rebecca Schwerdt, M.Sc.
- 2016 Evaluation of Publishable Humanly Usable Secure Password Creation Schemas
Bachelor thesis, Advisors: Prof. Manuel Blum and Prof. Müller-Quade
- 2014 sGrid: Centralized management of BOINC-based research projects - Summary
Poster, In GI-Jahrestagung, p. 2487. (2014)

WORK AND RESEARCH EXPERIENCE

- 2019, 2020 School of Computer Science, CMU, teaching assistant
- TA for Introduction to Cryptography

- 2014 – 2018 Freelancing in software- and web-development
- *Developed multiple websites*
- 2014 – 2018 Institute of Theoretical Informatics at KIT, student research assistant
- *Developed a visualization of a zero-knowledge proof example for educational purposes*
 - *Designed various educational materials, posters, flyers*
 - *Worked on the topic of CCA-secure commitments*
- 2013 – 2014 bluehands GmbH & Co.munication KG, software development
- *Collaborated on the development of a city guide app*
- 2013 FZI Research Center for Information Technology, applied software development
- *Developed a training app to support the recovery of stroke patients*

HONORS AND AWARDS

- 2015 InterAct scholarship for bachelor thesis research at CMU, Pittsburgh USA
- 2014 1st Place at the HackZurich, Europe’s largest hackathon (Team „Immersive“)
- *Virtual reality app which enabled users to capture and view stereo panoramas using a smartphone*
- 2014 1st Place at the Microsoft Imagine Cup national Final (Team „Krowd“)
- *System to monitor crowd movement by tracking signals of WiFi enabled devices to ensure security at big events*
- 2014 – 2015 Participated in the Femtec Careerbuilding-Program
- *Stipend for outstanding females in engineering and applied sciences, in cooperation with Germany’s top Universities and Employers*
- 2012 – 2014 ACM ICPC German Collegiate Programming Contest (GCPC) participation
ACM ICPC Northwestern European Regional Contest (NWERC) participation
- 2013 App Art Award by ZKM Karlsruhe (Team “Bitphonie”)
- *App that converted live sensor data of multiple smartphones into music*
- 2005 – 2010 Multiple awards at the Saporoshje city Olympiads in mathematics and physics
- 2009 8th place at the Ukrainian finals of the International competition for mathematical and logical games

ADDITIONAL INFORMATION

- Extracurricular activities Member of Studies Without Borders student organisation
- Language skills Mother tongue Russian and Ukrainian
Fluent German and English
- Spare time interests Digital art, photography

Pittsburgh, 01.01.2022