Jana Sotáková, PhD

Curriculum Vitæ

Current as of August 13, 2024

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Positions

2019–2024 PhD at QuSoft, ILLC at the University of Amsterdam, PhD thesis isogeny-based cryptography, advisors: Christian Schaffner, Serge Fehr, and Peter Bruin Full list of publications at https://jana-sotakova.github.io/research.html.
2022–2023 Meta AI, 4-month research internship, working on applying machine learning to analyzing the security of cryptographic schemes, published in CCS 2023.

Interests

- *cryptography, post-quantum cryptography:* focusing on isogeny-based cryptography and lattices. I have collaborated on projects studying hard problems underlying cryptographic protocols as well as (constant-time) implementations and fault attacks.
- *quantum*: studying quantum algorithms that will be used to break cryptographic schemes.
- machine learning: especially with applications to cryptographic attacks.

Education

| 2019–2024 | PhD at QuS supportingoft, ILLC at the University of Amsterdam, PhD thesis isogeny-based cryptography, advisors: Christian Schaffner, Serge Fehr, and Peter Bruin |
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| 2017-2019 | University of California, Berkeley, supported by Fulbright Student scholarship |
| 2015-2017 | ALGANT Master Programme , University of Regensburg and Leiden University graduated July 2017 (<i>cum laude</i> , <i>Sehr gut</i>) (thesis) |
| 2012-2015 | Bachelor of Mathematics, Masaryk University, Brno graduated August 2015 with honours; (thesis); Erasmus+ at Leiden University (2015). |

Skills

| analytical thinking | I am a strong problem solver; performed academic research in mathematics and cryptography. I work with the abstract and concrete, and find new connections. |
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| coding | my research involved writing lots of proof of concept code I collaborated on projects writing high-performance code, primarily using Python/Sage, C, Magma |
| teamwork | I have lots of experience working in and managing groups. I have collaborated with many researchers from diverse areas of expertice during my PhD. |
| presentation | I have ample experience teaching and giving scientific presentations at workshops and conferences. I enjoy adapting presentations on complex topics to the particular audience. |
| organization | I strongly believe in diversity, equity and inclusion, and have supported initiatives for women in science (NRing, WIQD), organizing events and community building. |
| languages | English (C2), Dutch (C1), Spanish (B2), German (A2), Czech (native) |