Niklas Niere

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Education

PhD Student   Nov. 2022 – Present
Paderborn University   Paderborn, Germany

- Research in TLS Security, Internet Censorship
- Advised by Prof. Dr. Juraj Somorovsky

M.Sc. in IT-Security   2022
Ruhr University Bochum   Bochum, Germany

- Overall Grade: 1.0 - Valedictorian
- Thesis: Analyzing and Circumventing ESNI/ECH-based Censorship, Grade: 1.0

B.Sc. in Computer Science   2019
Paderborn University   Paderborn, Germany

- Overall Grade: 1.3
- Thesis: Evaluating Side-Channel Oracles Using Machine Learning, Grade: 1.0

Publications

Towards Automated DNS Censorship Circumvention   Virtual FOCI 2026
Felix Lange, <u>Niklas Niere</u>, Juraj Somorovsky

Encrypted Client Hello (ECH) in Censorship Circumvention   FOCI 2025
<u>Niklas Niere</u>, Felix Lange, Nico Heitmann, Juraj Somorovsky

I(ra)nconsistencies: Novel Insights into Irans Censorship   Virtual FOCI 2025
Felix Lange, <u>Niklas Niere</u>, Jonathan von Niessen,
Dennis Suermann, Nico Heitmann, Juraj Somorovsky

Transport Layer Obscurity: Circumventing SNI Censorship on the TLS-Layer   IEEE S&P 2025
<u>Niklas Niere</u>, Felix Lange, Robert Merget, Juraj Somorovsky

🏆 Distinguished Paper Award

Turning Attacks into Advantages: Evading HTTP Censorship with HTTP Request Smuggling   FOCI 2024
Philipp Müller, <u>Niklas Niere</u>, Felix Lange, Juraj Somorovsky

TLS-Attacker: A Dynamic Framework for Analyzing TLS Implementations   ACSAC 2024
13 authors

🏆 2nd Place Impact Award

Poster: Circumventing the GFW with TLS Record Fragmentation   ACM CCS 2023
<u>Niklas Niere</u>, Sven Hebrok, Juraj Somorovsky, Robert Merget

Academic Positions

FOCI Program Committee   2026 – Present

USENIX Security Artifact Evaluation Committee   2026

USENIX Security External Reviewer   2026

NDSS Artifact Evaluation Committee   2025

Teaching

Theses   2023 – Present
Assistant Advisor

- Advised 5 Bachelor's and 9 Master's Theses

Lecture • Real World Crypto Engineering   2023 – Present
Course Assistant

- Organized exercises and exams
- Held lectures
- Supervised student assistants

Seminars   2023 – Present
Assistant Advisor

- Advised students writing seminar theses in a Bachelor's and a Master's seminar

Project Group• Building A Network Censor (BANC)   2023
Supervisor

- Supervised six students replicating a network censor over a year-long project

Open-Source Projects

⌂ DPYProxy   2023 – Present
Open-Source Censorship Circumvention Tool

⌂ Censor-Scanner   2023 – Present
Censorship Resarch Framework

⌂ TLS-Attacker   2020 – Present
TLS Research Framework