Stijn Pletinckx

PhD Student · Computer Science

2114 Harold Frank Hall, Santa Barbara, CA 93106-5110
✉ stijn@ucsb.edu | ⌂ https://spletinckx.github.io
https://scholar.google.com/citations?user=xVsZFkcAAAAJ&hl=en

Research Overview

My research focuses on the intersection of network security and Internet measurements, often incorporating concepts of web security as well. In general, my work aims to empirically study the Internet landscape within a security context.

Education

University of California, Santa Barbara   *Santa Barbara, CA, USA*

Doctor in Philosophy (Ph.D.), Computer Science   *September 2022 - present*

- Advisors: Dr. Christopher Kruegel and Dr. Giovanni Vigna

Delft University of Technology   *Delft, NL*

Master of Science, Computer Science   *September 2018 - July 2021*

- Thesis: "Out of Sight, Out of Mind: A Comprehensive Study on the Prevalence and Security Impact of Orphaned Web Page" (Published at CCS'21 [3])
- Advisor: Dr. -Ing Tobias Fiebig

Delft University of Technology   *Delft, NL*

Bachelor of Science, Computer Science and Engineering   *September 2015 - August 2018*

- Thesis: "Classification of Distributed Strategies for Port Scan Reconnaissance"
- Advisor: Dr. Christian Doerr
- Honours Programme [1], IDEA League Challenge Programme

Publications

[5] **Pletinckx, S.**, Kruegel, C., & Vigna, G. (2025). **A Large-Scale Measurement Study of the PROXY Protocol and its Security Implications**. Network and Distributed System Security Symposium (NDSS'25). Sand Diego: Internet Society

[4] **Pletinckx, S.**, Nguyen, T., Fiebig, T., Kruegel, C., & Vigna, G. (2023). **Certifiably Vulnerable: Using Certificate Transparency Logs for Target Reconnaissance**. IEEE European Symposium on Security and Privacy (EuroS&P'23). Delft: IEEE

[3] **Pletinckx, S.**, Borgolte, K., & Fiebig, T. (2021). **Out of Sight, Out of Mind: Detecting Orphaned Web Pages at Internet-Scale**. ACM Conference on Computer and Communications Security (CCS'21). Seoul: ACM

[2] **Pletinckx, S.**, Habben Jansen, G., Brussen, A., & van Wegberg, R. (2021). **Cash for the Register? Capturing Rationales of Early COVID-19 Domain Registrations at Internet-scale**. International Conference on Information and Communication Systems (ICICS'21). Valencia: IEEE

[1] **Pletinckx, S.**, Trap, C., & Doerr, C. (2018). **Malware Coordination using the Blockchain: An Analysis of the Cerber Ransomware**. IEEE Conference on Communications and Network Security (CNS'18). Beijing: IEEE

Research Experience

University of California, Santa Barbara - Dept of Computer Science   *Santa Barbara, CA, USA*

Advisors: Dr. Christopher Kruegel and Dr. Giovanni Vigna   *Sep. 2022 - Present*

- Graduate student researcher working on network security and web security

University of California, Santa Barbara - Dept of Computer Science *Santa Barbara, CA, USA*
ADVISOR: DR. CHRISTOPHER KRUEGEL AND DR. GIOVANNI VIGNA *Oct. 2021 - Mar. 2022*
- Six-month research internship working on the security of certificate transparency logs
- Published at EuroS&P'23 [4]

Delft University of Technology - Dept of Computer Science *Delft, NL*
ADVISOR: DR. -ING TOBIAS FIEBIG *Nov. 2020 - Jul. 2021*
- Master thesis research working on detecting orphaned web pages in the wild, and assessing their security posture at-scale.
- Published at CSS'21 [3]

Delft University of Technology - Dept of Policy Management *Delft, NL*
ADVISOR: DR. ROLF VAN WEGBERG *Feb. 2020 - Nov. 2020*
- Investigating website registration trends of COVID-19-related domains, and performing large-scale measurements on their content and behavior.
- Published at ICICS'21 [2]

Delft University of Technology - Dept of Computer Science *Delft, NL*
ADVISOR: DR. CHRISTIAN DOERR *Apr. 2018 - Jul. 2018*
- Bachelor thesis research analyzing network telescope data to detect patterns of distributed port scans.

Delft University of Technology - Dept of Computer Science *Delft, NL*
ADVISOR: DR. CHRISTIAN DOERR *Sept. 2016 - Jul. 2018*
- "Honours Programme" research investigating ransomware campaigns and their use of Bitcoin and blockhain technologies.
- Published at IEEE CNS'18 [1]

Awards and Fellowships

2024	**Faculty Outreach Grant**, University of California, Santa Barbara	*$ 19,989*
2022	**Academic Excellence Fellowship**, University of California, Santa Barbara	*$ 2,000*
2018 & 2019	**Top 500 Most Ambitious People Under 25**, The Next Web (TNW)	
2018	**Best Honours Programme Project University-wide**, Delft University of Technology	
2018	**Best Honours Programme Project Computer Science**, Delft University of Technology	
2017	**IDEA League Challenge Programme Scholar**, ETH Zurich, Polimi, RWTH, Chalmers, TU Delft	
2016	**Honours Programme Scholar**, Delft University of Technology	

Grants

Faculty Outreach Grant *$ 19,989*
UNIVERSITY OF CALIFORNIA, SANTA BARBARA *2024*
Awarded $19,989 to develop a High-School education program that teaches Computer Science and Cyber Security skills in the form of CTF challenges.

Teaching and Mentoring

CS177: Computer Security *Santa Barbara, CA*
UNIVERSITY OF CALIFORNIA, SANTA BARBARA *Spring 2024*
As a Teaching Assistant I was responsible for teaching sections, holding office hours, and answering student questions over email, Slack, and Piazza. The course assignments consisted of CTF challenges on topics such as Network Security, Web Security, Binary Analysis, and Cryptanalysis. I designed and developed a novel assignment/challenge giving students hands-on experience with Amplification Attacks.

School for Scientific thought *Santa Barbara, CA*
UNIVERSITY OF CALIFORNIA, SANTA BARBARA *2023 - 2024*
Organized a three-session workshop for high school students in Santa Barbara County, teaching introductory concepts of Computer Science, Cyber Security, and Artificial Intelligence. The course focused mainly on solving Capture the Flag (CTF) challenges.

Buddy Project Mentor   *Delft, NL*
Delft University of Technology   *2018 - 2019*

Providing guidance to students with a development disorder through weekly 1-on-1 sessions in which they get help with improving study and planning strategies.

Computer Science Program Mentor   *Delft, NL*
Delft University of Technology   *2016 - 2019*

Assisting first-year Computer Science and Engineering students in transitioning from high school to university. I organized weekly meetings for 2 groups of 12 students, having supervised 72 students in total over the course of my program. Responsibilities included: monitoring progress of the students, providing individual assistance where needed, and reporting on feedback of the students about the curriculum

References

- Giovanni Vigna (vigna@ucsb.edu)
  Professor of Computer Science at University of California, Santa Barbara

- Christopher Kruegel (chris@cs.ucsb.edu)
  Professor of Computer Science at University of California, Santa Barbara

- Tobias Fiebig (tfiebig@mpi-inf.mpg.de)
  Researcher at Max Planck Institute for Informatics

- Kevin Borgolte (kevin@iseclab.org)
  Professor of Software Security at Ruhr University Bochum

- Christian Doerr (christian.doerr@hpi.de)
  Professor of Cyber Security at Hasso Plattner Institute