

Klaus v. Gleissenthal

November 2023

Email k.freiherrvongleissenthal@vu.nl
Web <https://gleissen.github.io/>

Education

Jun 2012 - Sep 2016	Ph.D. in Computer Science	Technische Universität München (TUM)
Oct 2009 - Jun 2012	M.Sc. in Computer Science	TUM
Sep 2009 - Feb 2010	Exchange semester	University of Paris 7
Oct 2006 - Oct 2009	B.Sc. in Computer Science	TUM

Work Experience and Academic Visits

Apr 2023 -	Tenured Assistant Professor, Vrije Universiteit (VU) Amsterdam
Oct 2020 - Mar 2023	Tenure Track Assistant Professor, VU Amsterdam
March 2016- Oct 2020	Post-doc University of California, San Diego
Jan 2014 - Feb 2016	Visitor Microsoft Research, Cambridge
Nov 2013 - Jan 2014	Internship Microsoft Research, Cambridge
Dec 2010 - Aug 2011	Research Assistant at TUM, Autonomous Systems Group

Publications

Specification and Verification of Side-channel Security for Open-source Processors via Leakage Contracts. Zilong Wang, Gideon Mohr, [Klaus v. Gleissenthal](#), Jan Reineke, Marco Guarnieri. **Distinguished Paper Award. CCS'23.**

Don't Look UB: Exposing Sanitizer-Eliding Compiler Optimizations. Rapahel Isemann, Cristiano Giuffrida, Herbert Bos, Erik van der Kouwe, [Klaus v. Gleissenthal](#) **PLDI'23.**

Triereme: Speeding up hybrid fuzzing through efficient query scheduling. Elia Geretto, Julius Hohnerlein, Cristiano Giuffrida, Herbert Bos, Erik van der Kouwe, and [Klaus v. Gleissenthal](#). **ACSAC'23.**

Randomized Testing of Byzantine Fault Tolerant Algorithms. L. Winter, F. Buse, D. de Graaf, [Klaus v. Gleissenthal](#), B. Kulahcioglu Ozkan. **Distinguished Paper Award. OOPSLA'23.**

Refinement Types for Hardware. Robin Webbers, [Klaus v. Gleissenthal](#). **LATTE'22.**

Solver-Aided Constant-Time Hardware Verification. [Klaus v. Gleissenthal](#), Rami Gokhan Kici, Deian Stefan and Ranjit Jhala. **CCS'21.**

Automatically Eliminating Speculative Leaks from Cryptographic Code with Blade. Marco Vassena, Craig Disselkoen, [Klaus v. Gleissenthal](#), Sunjay Cauligi, Rami Gokhan Kici, Ranjit Jhala, Dean Tullsen, Deian Stefan. **Distinguished Paper Award. POPL'21.**

Towards Constant-Time Foundations for the New Spectre Era. Sunjay Cauligi, Craig Disselkoen, Klaus v. Gleissenthal, Dean Tullsen, Deian Stefan, Tamara Rezk, Gilles Barthe. **Honorable mention, Intel hardware security award. PLDI'20.**

IODINE: Verifying Constant-Time Execution of Hardware. [Klaus v. Gleissenthal](#), Rami Gokhan Kici, Deian Stefan and Ranjit Jhala. **Usenix Security'19.**

Pretend Synchrony: Synchronous Verification of Asynchronous Distributed Programs.
Klaus v. Gleissenthall, Rami Gokhan Kici, Alexander Bakst, Deian Stefan and Ranjit Jhala. **POPL'19**.

Verifying Distributed Programs via Canonical Sequentialization.
 Alexander Bakst, Klaus v. Gleissenthall, Rami Gokhan Kici and Ranjit Jhala. **OOPSLA'17**.

Cardinalities and universal quantifiers for verifying parameterized systems.
Klaus v. Gleissenthall, Nikolaj Bjorner and Andrey Rybalchenko. **PLDI'16**.

Symbolic Polytopes for Quantitative Interpolation and Verification.
Klaus v. Gleissenthall, Boris Köpf and Andrey Rybalchenko. **CAV'15**.

An Epistemic Perspective on Consistency of Concurrent Computations.
Klaus v. Gleissenthall, Andrey Rybalchenko. **CONCUR'13**.

Awards and Honours

2023	ERC Starting Grant
2023	Distinguished Paper Award, CCS
2023	Distinguished Paper Award, OOPSLA
2021	Finalist, Intel Hardware Security Award
2021	Distinguished Paper Award, POPL
2016	PhD, <i>summa cum laude</i> , TUM
2012	Microsoft Research Studentship
2012	Master <i>with high distinction</i> , TUM

Conference, Invited Seminar and Workshop Talks

March, 2023	Keynote speaker DCon, Lübeck		
Jun, 2021	UIUC Security Seminar	Jun, 2020	VU Amsterdam
Jun, 2020	MPI SP	Apr, 2020	University of Edinburgh
Apr, 2020	Microsoft Research Cambridge	Mar, 2020	NYU, New York
Feb, 2020	EPFL, Lausanne	Oct 2019	MPI-SWS, Kaiserslautern
Aug 2019	Usenix Security, Santa Clara	June 2019	VDS, Marrakesh
May 2019	Delft University of Technology	April 2019	IMDEA Software, Madrid
Jan 2019	POPL, Lisbon	Dec 2018	Microsoft Research, Cambridge
Nov 2018	TU Vienna	Nov 2018	IST Austria, Vienna
Nov 2017	OOPSLA, Vancouver	Oct 2017	CNS Review, San Diego
Jun 2016	PLDI, Santa Barbara	Nov 2015	NetOS group, University of Cambridge
Sep 2015	University of California, San Diego	Sep 2015	RiSE Seminar, IST Austria
Aug 2015	IMDEA Software Institute	Aug 2015	Parametrized Verification Workshop, Madrid
Jul 2015	CAV, San Francisco	May 2015	University of Leicester
May 2014	Alpine verification meeting, Frejus	Feb 2014	PPS, University of Paris 7
Feb 2014	LIAFA, University of Paris 7	Sep 2013	CONCUR, Buenos Aires

Program Committee member

2024	ASPLOS, PLDI, CSF, NETYS
2023	ASPLOS, NETYS, PLAS
2022	CAV, PLDI, CCSW, PLAS
2021	CCS, RAID, NETYS
2020	PriSC
2019	PLAS

Journal reviewer

ACM Transactions on Programming Languages and Systems (TOPLAS)
ACM Transactions on Software Engineering and Methodology (TOSEM)

Organizer

2023	Co-Chair Workshop on Programming Languages and Analysis for Security (PLAS)
2021	Artifact Evaluation Co-Chair, VMCAI
2019	Co-organizer Verification of Distributed Systems Workshop (VDS) at NETYS

Artifact Evaluation

2020	Committee Member, CAV
2018	Committee Member, POPL

Teaching

2022-	Instructor, Research Proposal Writing, VU Amsterdam
2021-	Instructor, Verification for Security, VU Amsterdam
2020-	Instructor, Compiler Construction, VU Amsterdam
2015	Teaching Assistant, Prolog, University of Cambridge
2013	Guest Lecture, Model checking, TUM
2012	Guest Lecture, Model checking, TUM

Advising

Saideh Ahangary	PhD	2022-	VU Amsterdam (co-advised)
Robin Webbers	PhD	2022-	VU Amsterdam (co-advised)
Raphael Isemann	PhD	2021-	VU Amsterdam (co-advised)
Johannes Blaser	PhD	2021-	VU Amsterdam (co-advised)
Alp Basar	MSc	2023-	VU Amsterdam (co-advised)
Max Meijer	MSc	2023-	VU Amsterdam (co-advised)
Paul Ellsipen	BSc	2023	VU Amsterdam, now MSc. at ETH Zürich
Max Gallup	BSc	2023	VU Amsterdam, now MSc. at VU
Hugo Matthews	BSc	2022	VU Amsterdam
Bogdan Cercel	BSc	2022	VU Amsterdam
Robin Webbers	MSc	2022	VU Amsterdam, now PhD at VU
Julius Hohnerlein	MSc	2022	VU Amsterdam. Thesis published at ACSAC'23
Alex Keizer	MSc	2022	VU Amsterdam, now PhD. at University of Edinburgh
Simon Heijungs	MSc	2021-2022	VU Amsterdam (co-advised)

Institutional Responsibilities

2022- Hiring Committee, Tenure Track Faculty, VU Amsterdam
2021- Coordinator M.Sc. thesis, Master's CS and Security, VU Amsterdam
2021- Co-Coordinator B.Sc. thesis, Bachelor's CS, VU Amsterdam
2021 Member of working group on graduation theses, VU Amsterdam

External Funding

2023 €1.5 Mio ERC Starting Grant.
2021 €250.000 VeriPatch: Safe and Automatic Patch Generation. Co-PI.
Netherlands Organisation for Applied Scientific Research (TNO).

Departmental Funding

2022 €250.000 Innovation Ph.D.: Verified Hardware for Memory Safety, Co-PI. VU Amsterdam.
2021 €250.000 Innovation Ph.D.: Networking and Verification, Co-PI. VU Amsterdam.