Prof. Dr. rer. nat. Volker Stolz, 10.12.1974, Würselen (DE)

Period	School attendance / other
1995–Summer 2001	Student of computer science at *RWTH Aachen University*
20.3.2001	Diploma in Computer Science at RWTH Aachen University
1.5.2001 –28.2.2006	Teaching/Research Assistant at *Chair for Computer Science II*, "MOVES: Software Modeling and Verification"
20.7.2006	PhD defense "Runtime Verification of Sequential and Concurrent Programs" at RWTH Aachen University
1.8.2006–20.5.2008	Post-doc fellow at United Nations University, Institute for Software Technology (formerly UNU-IIST)
20.5.2008–25.1.2010	Assistant Research Fellow at UNU-IIST Principal Investigator "Applied Runtime Verification" project funded by the Science and Technology Development Fund of Macau SAR
25.1.2010–31.1.2013	Adjunct Research Fellow at UNU-IIST
1.3.2010–31.7.2014	Researcher at University of Oslo (UiO) DAAD/NFR bilateral project "Runtime Verification for ABS Product Lines"
1.8.2014–30.7.2020	Associate Professor (førsteamanuensis) at Høgskulen på Vestlandet (HVL)
2016–2020	Visiting professor Guizhou Academy of Science, China
since 1.8.2014	**Adjunct Associate Professor** (førsteamanuensis) at UiO
since 30.7.2020	**Professor** at HVL
2016–2020	EU H2020 RIA project "COEMS — Continuous Observation of Embedded Multicore Systems" (site leader). Partners: Airbus, Thales, Accemic, U.Lübeck
2020–2022	NFR project "COEMS Training Network"
2017/2018	SIU (NO/CN) bilateral project "Methods and Tool Support for Refinement, Model Transformation and Verification of Network Systems"
2017–2021	SIU-CAPES (NO/BR) bilateral project "Modern Refactoring"
2020–2022	NFR (NO/FR) bilateral project "Security Relevant Analysis of Execution Traces"
2022	Institut Français Åsgard project "Trustworthy methodologies, tools and data security by design. . . "

Foreign languages: English; Spanish (*Diploma de Español, Nivel Intermedio*), Norwegian

Professional Activities

- Vice chair of EU COST Action IC1402 "Runtime Verification Beyond Monitoring (ARVI)"
- MC member EU COST Action CA20111 "European Research Network on Formal Proof' (EuroProofNet)"
- Steering Committee member of the Brazilian Formal Methods Symposium (2021–)
- Workshops Co-Chair 25th International Symposium on Formal Methods (FM'23), March 2023, Germany
- PC Co-Chair 22nd Intl. Conf. on Runtime Verification (RV'22)
- PC Co-Chair 17th Intl. Colloquium on Theoretical Aspects of Computing (ICTAC 2020)
- PC Co-Chair 23rd Brazilian Symp. on Formal Methods (SBMF 2020)
- General Chair 15th Intl. Conf. on integrated Formal Methods (iFM'19)
- Workshops organization co-chair for the 6th European Conference on Service-Oriented and Cloud Computing (ESOCC 2017)
- Programme co-chair of the 29th Norwegian Informatics Conference (NIK 2016)

- Workshop chair Intl. Workshop on Harnessing Theories and Tool Support in Software (TTSS) 2007–2011, 2013–2014
- Workshops organization co-chair for the 20th Intl. Symp. on Formal Methods (FM 2015)
- Workshop co-chair "7. Arbeitstagung Programmiersprachen" (co-located with "SE 2014: Software Engineering 2014", February 2014, Kiel/Germany).
- Reviewer for scientific journals: Science of Computer Programming, Software Testing, Verification and Reliability, Knowledge-Based Systems, Information and Software Technology, ACM Transactions on Autonomous and Adaptive Systems, Software and Systems Modeling, Acta Informatica

Selected Program Committee memberships:

- Intl. Conf. on Runtime Verification (RV), 2016–2018, 2022–
- Intl. Conf. on Theoretical Aspects of Computing (ICTAC), 2022
- Brazilian Formal Methods Symposium (SBMF), 2020–
- Intl. Workshop on Security of Software/Hardware Interfaces (SILM) 2022–
- ECOOP Workshop on Verification and Monitoring at Runtime Execution (VORTEX) 2023
- IEEE Intl. Conf. on Engineering of Complex Computer Systems (ICECCS) 2011–2015, 2017
- Intl. Symp. on Temporal Representation and Reasoning (TIME) 2013–2014
- IEEE Intl. workshop UML and Formal Methods (UML&FM) 2011–2012
- Intl. Workshop on Safety and Security in Cyber-Physical Systems (SSCPS) 2011–2013
- OpenCert workshop 2008–2009
- IEEE Intl. Symp. on Theoretical Aspects of Software Engineering (TASE) 2009–2010, 2014
- Intl. Workshop/Conf. on Formal Aspects of Component Software (FACS) 2009–2012
- Member of the German special interest group Gesellschaft für Informatik e.V.

Selected Publications. Total: 83 on DBLP, 1 forthcoming

1. T.Dang, V.Stolz, Eds.: Proc. 22nd Intl. Conf. on Runtime Verification. RV'22, LNCS Vol. 13498, Springer, 2022.
2. G.Carvalho, V.Stolz, Eds.: Selected papers from the Brazilian Symposium on Formal Methods (SBMF 2020). Science of Comp. Prog., Springer, 2022.
3. V.Pun, V.Stolz, A.Simão, Eds.: Proc. Theoretical Aspects of Computing. ICTAC 2020, LNCS Vol. 12545, Springer, 2020.
4. G.Carvalho, V.Stolz, Eds.: Proc. Formal Methods: Foundations and Applications. SBMF 2020, LNCS Vol. 12475, Springer, 2022.
5. Ch.Colombo, Y.Falcone, M.Leucker, G.Reger, C.Sánchez, G.Schneider, V.Stolz: COST Action IC1402 Runtime Verification Beyond Monitoring. RV 2018, LNCS Vol. 11237, Springer, 2018.
6. Z.A.Mann, V.Stolz, Eds.: Advances in Service-Oriented and Cloud Computing, CCIS 824, Springer, 2018.

7. K.Havelund, M.Leucker, G.Reger, V.Stolz, Eds.: A Shared Challenge in Behavioural Specification (Dagstuhl Seminar 17462), 2017.
8. L.M.Kristensen, V.Stolz, Eds.: Proc. Norsk Informatikkonferanse 2016, BibSys.
9. K.Schmid et al., Eds.: "Software Engineering Workshops 2014", CEUR-WS Vol. 1129, 2014.
10. V.Stolz, Ed.: "Special Issue Harnessing Theories for Tool Support in Software", J. Innovations in Systems and Software Engineering 9(1), Springer, November 2012.
11. J.Xue, V.Stolz, Eds.: Proc. of the 6th Intl. Workshop on Harnessing Theories for Tool Support in Software, ENTCS Vol. 309, Elsevier, 2014.
12. V.Stolz, Miaomiao Zhang, Eds.: Proc. of the 4th Intl. Workshop on Harnessing Theories for Tool Support in Software, ENTCS Vol. 274, Elsevier, 2011.
13. V.Stolz, E.Broch Johnsen, Eds.: Proc. of the 3rd Intl. Workshop on Harnessing Theories for Tool Support in Software, ENTCS Vol. 266, Elsevier, 2010.
14. V.Stolz, J.Zhao, Eds.: Proc. of the 2nd Intl. Workshop on Harnessing Theories for Tool Support in Software, ENTCS Vol. 243, Elsevier, 2009.
15. G.Pu, V.Stolz, Eds.: Proc. of the 1st Intl. Workshop on Harnessing Theories for Tool Support in Software, ENTCS Vol. 207, Elsevier, 2008.

16. F.Ahishakiye, J.I.R.Jarabo, L.M.Kristensen, V.Stolz: Coverage Visualization and Analysis of Net Inscriptions in Coloured Petri Net Models. Accepted at J. Innovations in Systems and Software Engineering, 2023.
17. O.Abusdal, C.Din, V.Pun, V.Stolz: I can see clearly now: Clairvoyant Assertions for Deadlock Checking. The Logic of Software. A Tasting Menu of Formal Methods, LNCS Vol. 13360, Springer, 2022.
18. O.Abusdal, E.Kamburjan, V.Pun, V.Stolz: A Notion of Equivalence for Refactorings with Abstract Execution. ISoLA 2022, LNCS Vol. 13702, Springer LNCS, 2022.
19. G.Audrito, F.Damiani, V.Stolz, G.Torta, M.Viroli: Distributed runtime verification by past-CTL and the field calculus. Systems and Software 187, 2022.
20. G.Audrito, R.Casadei, F.Damiani, V.Stolz, M.Viroli: Adaptive distributed monitors of spatial properties for cyber-physical systems. Systems and Software 175, 2021.
21. F.Ahishakiye, J.I.R.Jarabo, L.M.Kristensen, V.Stolz: MC/DC Test Cases Generation based on BDDs. SETTA 2021, LNCS Vol. 13071, Springer, 2021.
22. F.Ahishakiye, J.I.R.Jarabo, K.I Pun, V.Stolz: Hardware-Assisted Online Data Race Detection. Formal Methods in Outer Space, LNCS Vol. 13065, Springer, 2021.
23. F.Ahishakiye, J.I.R.Jarabo, L.M.Kristensen, V.Stolz: Coverage Analysis of Net Inscriptions in Coloured Petri Net Models. SETTA 2021, LNCS Vol. 12591, Springer, 2020.
24. V.Stolz, V.Pun, R.Gheyi: Refactoring and Active Object Languages. ISoLA 2020, LNCS Vol. 12477, Springer, 2020.

25. R.Wang, C.Artho, L.M.Kristensen, V.Stolz: Multi-objective Search for Model-based Testing. Intl. Conf. on Software Quality, Reliability and Security (QRS), IEEE, 2020.

26. R.Wang, C.Artho, L.M.Kristensen, V.Stolz: Visualization and Abstractions for Execution Paths in Model-based Software Testing. Intl. Conf. on integrated Formal Methods. LNCS Vol. 11918, Springer, 2019.

27. F.Ahishakiye, V.Stolz, S.Jaksic, F.D.Lange, M.Schmitz, D.Thoma: Non-intrusive MC/DC measurement based on traces. Intl. Symp. on Theor. Aspects of Soft. Eng. IEEE, 2019.

28. R.Wang, L.M.Kristensen, H.Melin, V.Stolz: Automated test case generation for the Paxos single-decree protocol using a Coloured Petri Net model. J. Log. Algebr. Meth. Program. Elsevier, 2019.

29. D.Schnetzer Fava, M.Steffen, V.Stolz: Operational semantics of a weak memory model with channel synchronization. J. Log. Algebr. Meth. Program. Elsevier, 2019.

30. G.Audrito, F.Damiani, V.Stolz, M.Viroli: On Distributed Runtime Verification by Aggregate Computing. VORTEX. EPTCS, 2019

31. R.Wang, L.M.Kristensen, H.Meling, V.Stolz: "Model-based Testing of the Gorums Framework for Fault-tolerant Distributed Systems", ToPNOC, LNCS Vol. 11090, Springer, 2018.

32. D.Li, K. I Pun, V.Stolz, S.Jaksic: "Stream-based dynamic data race detection", Norsk Informatikkonferanse (NIK) 2018.

33. D.F.Schnetzer, M.Steffen, V.Stolz: "Operational Semantics of a Weak Memory Model with Channel Synchronization", Formal Methods (FM), LNCS Vol. 10951, Springer, 2018.

34. S.Jaksic, M.Leucker, D.Li, V.Stolz: "COEMS — open traces from the industry", Intl. Workshop on Competitions, Usability, Benchmarks, Evaluation, and Standardisation for Runtime Verification Tools. Kalpa Publications in Computing 3, EasyChair, 2017.

35. F.Macias, A.Rutle, V.Stolz: "An Approach to Flexible Multilevel Modelling", EMISA(13), 2018.

36. R.Wang, L.M.Kristensen, H.Meling, V.Stolz: "Application of Model-based Testing on a Quorum-based Distributed Storage", Intl. Workshop on Petri Nets and Software Engineering, PNSE'17, CEUR-WS Vol. 1846, 2017.

37. Ka I Pun, M.Steffen, V.Stolz: "Effect-Polymorphic Behaviour Inference for Deadlock Checking", J. of Logical and Algebraic Methods in Programming. Elsevier, 2016.

38. F.Macias, A.Rutle, V.Stolz: "MultEcore: Combining The Best of Fixed-Level and Multilevel Metamodelling", 3rd Intl. Workshop on Multi-Level Modelling, CEUR-WS Vol. 1722, 2016.

39. C.M.Rosenberg, M.Steffen, V.Stolz: "Leveraging D-Trace for Runtime Verification", Intl. Conf. on Runtime Verification, LNCS Vol. 10012. Springer, 2016.

40. A.M.Eilertsen, V.Stolz, A.Bagge: "Safer Refactorings", Intl. Symp. on Leveraging Applications of Formal Methods, Verification and Validation (ISoLA 2016), LNCS Vol. 9952. Springer, 2016.

41. E.Bodden, K.I Pun, M.Steffen, V.Stolz, A.Wickert: "Information flow analysis for Go", ibid.

42. E.Kristiansen, V.Stolz: "Search-based composed refactorings". Norsk Informatikkonferanse (NIK) 2014.

43. D.Li, X.Li, Z.Liu, V.Stolz: "Automated transformations from UML behavior models to contracts". SCIENCE CHINA Information Sciences 57(12), 2014.

44. G.Goeri, E.B.Johnsen, R.Schlatte, V.Stolz: "Erlang-style Error Recovery for Concurrent Objects with Cooperative Scheduling". 6th Intl. Symp. on Leveraging Applications of Formal Methods, Verification and Validation (ISoLA 2014), LNCS Vol. 8803. Springer, 2014.

45. I.Lanese, M.Lienhardt, M.Bravetti, E.B.Johnsen, R.Schlatte, V.Stolz, G.Zavattaro: "Fault Model Design Space for Cooperative Concurrency". Ibid.

46. Ka I Pun, M.Steffen, V.Stolz: "Deadlock checking by Data Race Detection". J. of Logical and Algebraic Methods in Programming. Elsevier, 2014.

47. Ka I Pun, M.Steffen, V.Stolz: "Behaviour inference for deadlock checking". Theoretical Aspects of Software Engineering (TASE 2014). IEEE, 2014.

48. Ka I Pun, M.Steffen, V.Stolz: "Effect-Polymorphic Behaviour Inference for Deadlock Checking", Proc. 12th Intl. Conf. Software Engineering and Formal Methods (SEFM'14), LNCS Vol. 8702, Springer, 2014.

49. Ka I Pun, M.Steffen, V.Stolz: "Deadlock checking by race detection". Proc. of the 5th Intl. Conf. on Fundamentals of Software Engineering (FSEN'13), LNCS Vol. 8161, Springer, 2013.

50. D.Li, X.Li, Z.Liu, V.Stolz: "Support Formal Component-based Development with UML Profile". 22nd Australian Conf. on Software Engineering (ASWEC 2013). IEEE, 2013.

51. S.Arzt, K.Falzon, A.Follner, S.Rasthofer, E.Bodden, V.Stolz: "How useful are existing monitoring languages for securing Android apps?". Lecture Notes in Informatics Vol. 251, Gesellschaft für Informatik, 2013.

52. W.Ke, X.Li, Z.Liu, V.Stolz: "rCOS: a formal model-driven engineering method for component-based software", Frontiers of Computer Science in China 6(1), Springer, 2012.

53. E.Bodden, K.Falzon, Ka I Pun, V.Stolz: "Delta-Oriented Monitor Specification". Intl. Symp. on Leveraging Applications of Formal Methods, Verification and Validation (ISoLA'12), LNVS Vol. 7609, Springer, 2012.

54. Ka I Pun, M.Steffen, V.Stolz: "Deadlock Checking by a Behavioral Effect System for Lock Handling", J. Log. and Alg. Prog. 81(3), 2012.

55. C.Bertolini, M.Schäf, V.Stolz: "Towards a Formal Integrated Model of Collaborative Healthcare Workflows", Workshop on Foundations of Health Information Engineering and Systems, LNCS Vol. 7151, Springer, 2012.

56. D.Li, X.Li, V.Stolz: "Model querying with graphical notation of QVT relations". ACM Software Engineering Notes, 37(4), ACM, 2012.

57. D.Li, X.Li, Z.Liu, V.Stolz: "Interactive Transformations from Object- Oriented Models to Component-Based Models". Proc. of Formal Aspects of Component Systems (FACS) 2011, LNCS Vol. 7253, Springer, 2012.

58. D.Li, X.Li, V.Stolz: "QVT-based model transformation using XSLT", ACM Software Engineering Notes, 36(1), ACM, 2011.

59. V. Stolz: “Temporal Assertions with Parametrized Propositions”. Journal of Logic and Computation 20(3), Oxford University Press, 2010.

60. V.Stolz: “An integrated multi-view model evolution framework”. J. Innovations in Systems and Software Engineering 6(1–2), Springer, 2010.

61. L.Bin, X.Li, Z.Liu, C.Morisset, V.Stolz: “Robustness testing for software components”, J. Science of Comp. Prog. 75(10), Elsevier, 2010.