Christoph Gote

Curriculum Vitæ

EDUCATION

2017–2021   **Doctor of Sciences ETH Zurich**   **Zurich, Switzerland**
Chair of Systems Design, Department of Management, Technology, and Economics, ETH Zurich

Supervisor: Prof. Dr. Dr. Frank Schweitzer
Doctoral Thesis: Quantifying Individual and Collective Aspects of Performance in Software Development Teams

2016–2017   **MSc Investment & Wealth Management**   **London, United Kingdom**
Imperial College Business School

Master Thesis: Credit Card Fraud Detection Using Computational Intelligence: Classification in Highly Unbalanced Datasets

2013–2016   **MSc Electrical Engineering and Information Technology**   **Karlsruhe, Germany**
Karlsruhe Institute of Technology

Specialisation: Systems and Control
Master Thesis: Development and Comparison of Adaptation Functions for Driver Assistant Systems in Takeover Scenarios using Differential Games

2014–2015   Year abroad, Master of Systems and Control   **Delft, the Netherlands**
Delft University of Technology

2010–2013   **BSc Electrical Engineering and Information Technology**   **Karlsruhe, Germany**
Karlsruhe Institute of Technology

Bachelor Thesis: Development of a Concept for Determining Driver-Specific Reference-Trajectories Based on Road Data

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WORK EXPERIENCE

since 2022   **Postdoctoral Researcher**, Data Analytics Group, University of Zurich

since 2021   **Postdoctoral Researcher**, Chair of Systems Design, ETH Zurich

since 2019   **OSS Project Developer and Maintainer**

since 2021   gambit — github.com/gotec/gambit
since 2019   git2net — git2net.readthedocs.io

since 2019   **Teaching Assistant**, ETH Zurich

2020–2022   System Dynamics and Complexity, *Prof. Dr. Dr. Frank Schweitzer*
2019–2021   Complex Networks, *Prof. Dr. Dr. Frank Schweitzer*

since 2018   **System Administrator**, Chair of Systems Design, ETH Zurich

2015   **Research Intern**, Delft Haptics Lab, Delft University of Technology

Supervisor: Prof. Dr. David Abbink
Project Title: Driver Modelling for Adaptive Steering Prediction

2011–2016   **Teaching Assistant**, Karlsruhe Institute of Technology

2013–2016   Optimisation of Dynamic Systems, *Prof. Dr. Sören Hohmann*
2014   Advanced Control Techniques Laboratory, *Prof. Dr. Sören Hohmann*
2013–2014   System Dynamics and Control Engineering, *Prof. Dr. Sören Hohmann*
2011–2013   Digital Technology, *Prof. Dr. Jürgen Becker*

PUBLICATIONS

2022   Gote, C., V. Perri, and I. Scholtes, Predicting Influential Higher-Order Patterns in Temporal Network Data. *2022 IEEE/ACM 44th International Conference on Advances in Social Networks Analysis and Mining (ASONAM).*

2022   Russo, G., C. Gote, L. Brandenberger, S. Schlosser, and F. Schweitzer, Disentangling Active and Passive Cosponsorship in the U.S. Congress. *arXiv preprint arXiv:2205.09674.*

2022   Gote, C., P. Mavrodiev, F. Schweitzer, and I. Scholtes, Big Data = Big Insights? Operationalising Brooks' Law in a Massive GitHub Data Set. *2022 IEEE/ACM 44th International Conference on Software Engineering (ICSE).*

2021   Gote, C. and C. Zingg, gambit – An Open Source Name Disambiguation Tool for Version Control Systems. *2021 IEEE/ACM 18th International Conference on Mining Software Repositories (MSR)*, pp. 80-84.

2021   Gote, C., I. Scholtes, and F. Schweitzer, Analysing Time-Stamped Co-Editing Networks in Software Development Teams using git2net. *Empirical Software Engineering*, 26, 75.

2021   Hackl, J., I. Scholtes, L. Petrović, V. Perri, L. Verginer, and C. Gote, Analysis and Visualisation of Time Series Data on Networks with Pathpy. *In Companion Proceedings of the Web Conference 2021 (WWW)*, pp. 530-532.

2020   Gote, C., G. Casiraghi, F. Schweitzer, and I. Scholtes, Predicting Sequences of Traversed Nodes in Graphs using Network Models with Multiple Higher Orders. *arXiv preprint arXiv:2007.06662.*

2020   Nanumyan, V., C. Gote, and F. Schweitzer, Multilayer Network Approach to Modelling Authorship Influence on Citation Dynamics in Physics Journals. *Physical Review E*, 102(3), 032303.

2019   Gote, C., I. Scholtes, and F. Schweitzer, git2net – Mining Time-Stamped Co-Editing Networks from Large git Repositories, *2019 IEEE/ACM 16th International Conference on Mining Software Repositories (MSR)*, pp. 433-444.

2017   Ludwig, J., C. Gote, M. Flad, and S. Hohmann, Cooperative Dynamic Vehicle Control Allocation using Time-Variant Differential Games. *2017 IEEE International Conference on Systems, Man, and Cybernetics (SMC)*, pp. 117-122.

2014   Gote, C., M. Flad, and S. Hohmann, Driver Characterisation & Driver Specific Trajectory Planning: An Inverse Optimal Control Approach. *2014 IEEE International Conference on Systems, Man, and Cybernetics (SMC)*, pp. 3014-3021.

TALKS AND POSTERS

2022   **Talk**, Quantifying the Tradeoff Between Team Productivity and Resilience. *Conference on Complex Systems (CCS) 2022*, October 17-21, Palma de Mallorca, Spain.

2022   **Talk**, The Changing Nature of Social Hierarchies. *Conference on Complex Systems (CCS) 2022*, October 17-21, Palma de Mallorca, Spain.

2022   **Talk**, The Challenges and Opportunities of Using Big Data to Study Team Productivity. *Conference on Complex Systems (CCS) 2022*, October 17-21, Palma de Mallorca, Spain.

2022   **Talk**, Big Data = Big Insights? Operationalising Brooks' Law in a Massive GitHub Data Set. *International Conference on Software Engineering (ICSE) 2022*, May 10-13, hybrid (online and Pittsburgh, PA, USA).

2021   **Invited Talk**, MOGen – A Multi-Order Model of Paths in Networks, *Genua RES Conference 2021*, July 14, online (originally Kirchheim bei München, Germany).

2021   **Talk**, gambit – An Open Source Name Disambiguation Tool for Version Control Systems, *Mining Software Repositories (MSR) 2021*, May 17-19, online (originally Madrid, Spain).

2020   **Poster**, Analysing Time-Stamped Co-Editing Networks in Software Development Teams using git2net, *Network Science Society Conference (NetSci) 2020*, September 17-25, online (originally Rome, Italy).

2020   **Poster**, A Generative Multi-Order Model to Predict Variable-Length Paths in Networks, *Network Science Society Conference (NetSci) 2020*, September 17-25, online (originally Rome, Italy).

2020	**Poster**, AIC Based Model Selection for Generative Multi-Order Models of Paths in Networks, *Network Science Society Conference (NetSci) 2020*, September 17-25, online (originally Rome, Italy).
2020	**Talk**, A Generative Multi-Order Model to Predict Variable-Length Paths in Networks, *Network Science Society Conference (NetSci) 2020 – Machine Learning In Network Science Satellite*, September 17-25, online (originally Rome, Italy).
2019	**Talk**, git2net – An Open Source Package to Mine Time-Stamped Collaboration Networks from Large git Repositories, *INFORMATIK 2019 – Best of Data Science made in D/A/CH*, September 23-26, Kassel, Germany.
2019	**Talk**, Model selection for coupled growth of multi-layer networks, *Network Science Society Conference (NetSci) 2019*, May 27-31, Burlington, VT, USA.
2019	**Poster**, git2net – An Open Source Package to Mine Time-Stamped Collaboration Networks from Large git Repositories, *Network Science Society Conference (NetSci) 2019*, May 27-31, Burlington, Vermont, USA.
2019	**Invited Talk**, Variable-order network models based on path data, *Network Science Society Conference (NetSci) 2019 – Higher-Order Models in Network Science*, May 27-31, Burlington, Vermont, USA.
2019	**Talk**, git2net – An Open Source Package to Mine Time-Stamped Collaboration Networks from Large git Repositories, *Mining Software Repositories (MSR) 2019*, May 26-27, Montreal, QC, Canada.
2014	**Talk**, Driver Characterisation & Driver Specific Trajectory Planning: An Inverse Optimal Control Approach. *Systems, Man, and Cybernetics (SMC) 2014*, October 5-8, San Diego, CA, USA.

AWARDS

2019	German Informatics Society (GI) selects "git2net: Mining Time-Stamped Co-Editing Networks from Large git Repositories" for **Best of Data Science made in D/A/CH** track at INFORMATIK 2019.
2019	**Special MSR Mention** for our paper "git2net: Mining Time-Stamped Co-Editing Networks from Large git Repositories" at MSR 2019.
2017	**MSc Investment & Wealth Management Best Applied Financial Report Prize**.
2017	**Dean's List** for MSc Investment & Wealth Management (top 10% of class).