Tassilo Tanneberger

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Faculty of Computer Science
Chair of Compiler Construction
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https://tanneberger.me
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Research Interests

Domain Specific Languages (DSLs), Distributed Systems, Embedded Systems, Scheduling Theory, RTOS, Deterministic Concurrency.

Education

2021 - 2026	Study of Computer Science (Diploma Dipl.-Inf.) TUD Dresden University of Technology
5/2021	Grammerschool with Grade 1.7

Professional Experience

9/2024 - 4/2025	Visiting Research Scholar at UC Berkeley supervised by Edward A. Lee
2023 - now	Co-founder and Member of Board of Directors DD-IX Dresden Internet Exchange e.V.
11/2021 - now	Research Student at the Chair for Compiler Construction, TUD Dresden University of Technology
4/2021 - 10/2021	Engineer working on Tooling for Industrial Robots Society for the Advancement of Applied Computer Science (GFaI)

Open Source Projects

2022	TLMS - Transit Live Mapping Solutions *Reverse engineering of the radio protocol used for controlling traffic lights in Germany. Design and implementation of a platform that shows live positions of trams and buses based on this data.* `https://map.tlm.solutions`
2021	Lingua-Franca (LF) - a polyglot coordination language for reactive, concurrent, and time-sensitive applications. *Optimization of the C++ runtime environment, development of a package manager and built tool for the LF ecosystem.* `https://lf-lang.org`

Extracurricular Activities

11/2023 - now	Task-Force for the Strategic Development of the Faculty Faculty of Computer Science, TUD Dresden University of Technology
11/2022 - now	Member of the Faculty Council Faculty of Computer Science, TUD Dresden University of Technology

Publications

[Lin et al.(2024)] Shaokai Lin, Erling Jellum, Mirco Theile, Tassilo Tanneberger, Binqi Sun, Chadlia Jerad, Ruomu Xu, Guangyu Feng, Christian Menard, Marten Lohstroh, Jeronimo Castrillon, Sanjit Seshia, and Edward Lee. 2024. PretVM: Predictable, Efficient Virtual Machine for Real-Time Concurrency. arXiv:2406.06253 [eess.SY]

[Menard et al.(2023)] Christian Menard, Marten Lohstroh, Soroush Bateni, Matthew Chorlian, Arthur Deng, Peter Donovan, Clément Fournier, Shaokai Lin, Felix Suchert, Tassilo Tanneberger, Hokeun Kim, Jeronimo Castrillon, and Edward A. Lee. 2023. High-performance Deterministic Concurrency Using Lingua Franca. *ACM Trans. Archit. Code Optim.* 20, 4, Article 48 (oct 2023), 29 pages. `https://doi.org/10.1145/3617687`