

TOBIAS STOCKER

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INTERESTS

My research interests are in serverless cloud orchestration, data processing and machine learning. I am currently working on extending the declarative nature of data processing in the cloud.

EDUCATION

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| Sep 2025 - present | PhD in Computer Science ETH Zürich, Zurich, Switzerland <ul style="list-style-type: none">- Working on serverless data processing in the cloud- Advisor: Ana Klimovic (Systems Group) |
| Sep 2022 - Apr 2025 | Master of Science in Computer Science ETH Zürich, Zurich, Switzerland <ul style="list-style-type: none">- Major: Data Management Systems, Minor: Machine Learning- Master Thesis: Efficient Data Query Execution as Serverless Workflows |
| Sep 2019 - Sep 2019 | Bachelor of Science in Computer Science ETH Zürich, Zurich, Switzerland <ul style="list-style-type: none">- Bachelor Thesis: SSA Data Flow Information for Semantic Code Tasks |
| Aug 2012 - Jul 2018 | Matura (Swiss Academic Baccalaureate) Kantonsschule Zug, Zug, Switzerland <ul style="list-style-type: none">- Focus: Mathematics with Applied Physics |

PUBLICATIONS

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| CIDR'26 | End-to-End Declarative Data Analytics: Co-designing Engines, Interfaces, and Cloud Infrastructure
Pinghe Li*, Tom Kuchler*, Marko Kabić*, Tobias Stocker* , Gustavo Alonso, Ana Klimovic
To appear in the Proceedings of the Conference on Innovative Data Systems Research (CIDR), 2026. |
| SOSP'25 | Unlocking True Elasticity for the Cloud-Native Era with Dandelion
Tom Kuchler, Pinghe Li, Yazhuo Zhang, Lazar Cvetković, Boris Goranov, Tobias Stocker , Leon Thomm, Simone Kalbermatter, Tim Notter, Andrea Lattuada, Ana Klimovic
Proceedings of the ACM Symposium on Operating Systems Principles, 2025. |

POSTERS

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| SOSP'25 | Declarative Stack for Cloud Data Analytics
Tobias Stocker* , Pinghe Li*, Tom Kuchler*, Marko Kabić*, Gustavo Alonso, Ana Klimovic
Presented at the ACM Symposium on Operating Systems Principles, 2025. |
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INDUSTRY EXPERIENCE

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| Oct 2022 - Jul 2024 | Junior Software Engineer Innovation Process Technology AG, Zurich, Switzerland <ul style="list-style-type: none">- Part time (40%) working student- Maintenance and further development of both a data warehouse as well as data mesh platform of a swiss insurance company |
| Jan 2019 - Jun 2019 | Intern Ringler Informatik, Baar, Switzerland <ul style="list-style-type: none">- Various tasks ranging from Cypres end-to-end testing over development and maintenance of company websites to customer support and marketing |

TEACHING EXPERIENCE

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| Fall Semester 2025 | Doctoral Teaching Assistant ETH Zürich, Zurich, Switzerland <ul style="list-style-type: none">- Systems Programming and Computer Architecture |
| Nov 2021 - Jul 2022 | Highschool Teaching Substitute Kantonsschule Zug, Zug, Switzerland |
| Oct 2020 - Dec 2020 | <ul style="list-style-type: none">- Teaching Introduction to Computer Science (9th graders)- Teaching Computer Science (12th graders) |

TECHNICAL SKILLS

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| Languages | C, C++, Go, Java, Python, Rust, SQL |
| Tools/Libraries | gRPC, protobuf, PyTorch, Pandas, Numpy, Apache Arrow, Apache Spark |