

STEFFEN MAASS

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Software Engineer
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Work Experience

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| Senior Software Engineer | Google, Sunnyvale, CA Working in the cloud networking team on Google's load balancing platform. | since 08/2019 |
| Ph.D. Software Engineering Intern | Google, Sunnyvale, CA Intern in the cloud networking team, working on Google's load balancing platform. | 05/2018 – 08/2018 |
| Ph.D. Software Engineering Intern | Google, Mountain View, CA Intern in the Platforms team, working on performance diagnosis of Google's next-gen SDN platform. | 05/2016 – 08/2016 |
| Ph.D. Software Engineering Intern | Google, New York, NY Working on the control plane of the load-balancing platform of Google's front-end serving infrastructure. | 05/2015 – 08/2015 |
| Graduate Research Assistant | Georgia Tech, Atlanta, GA Research in the <i>Embedded Pervasive Lab</i> under Dr. Kishore Ramachandran and <i>Systems Software & Security Lab</i> under Dr. Taesoo Kim. | 08/2013 – 05/2019 |
| Software Developer | maas IT consulting, Kirchheim unter Teck, Germany Development of customized web applications. | 2008 – 2013 |

Education

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| Georgia Institute of Technology | Ph.D. in Computer Science Atlanta, GA Advisor: Dr. Taesoo Kim Thesis: <i>Systems Abstractions for Big Data Processing on a Single Machine</i> | 01/2015 – 08/2019 GPA: 4.0 / 4.0 |
| Georgia Institute of Technology | M.Sc. in Computer Science Atlanta, GA Specialization: <i>Networking</i> | 08/2013 – 12/2014 GPA: 4.0 / 4.0 |
| University of Stuttgart | M.Sc. in Computer Science Stuttgart, Germany Specializations: <i>Database Systems</i> and <i>Distributed Systems</i> Thesis: <i>Distributed Graph Processing and Partitioning for Spatiotemporal Queries in the Context of Camera Networks</i> | 10/2012 – 08/2015 GPA: 1.1 / 1.0 (<i>excellent with distinction</i>) |
| University of Stuttgart | B.Sc. in Computer Science Stuttgart, Germany Thesis: <i>Efficient Strategies for Task Distribution for Public Sensing</i> | 10/2009 – 09/2012 GPA: 1.5 / 1.0 (<i>excellent</i>) |

Publications

- ecoTLB: Eventually Consistent TLBs (to appear)**
Steffen Maass*, Mohan Kumar*, Taesoo Kim, Tushar Krishna, and Abhishek Bhattacharjee.
TACO'20, July, 2020.
* marks joint first authors.

2. **SOLROS: A Data-Centric Operating System Architecture for Heterogeneous Computing**
Changwoo Min, Woon-Hak Kang, Mohan Kumar, Sanidhya Kashyap, **Steffen Maass**, Heeseung Jo, and Taesoo Kim.
EuroSys'18, Porto, Portugal, April, 2018.
Acceptance rate: 16.4%
3. **LATR: Lazy Translation Coherence**
Mohan Kumar*, **Steffen Maass***, Sanidhya Kashyap, Ján Veselý, Zi Yan, Taesoo Kim, Abhishek Bhattacharjee, and Tushar Krishna.
ASPLOS'18, Williamsburg, VA, USA, March, 2018.
*** marks joint first authors.**
Acceptance rate: 17.5%
Code: <https://github.com/sslabs-gatech/mosaic/>
4. **MOSAIC: Processing a Trillion-Edge Graph on a Single Machine.**
Steffen Maass, Changwoo Min, Sanidhya Kashyap, Woon-Hak Kang, Mohan Kumar, and Taesoo Kim.
EuroSys'17, Belgrade, Serbia, April, 2017.
Best Student Paper Award
Acceptance rate: 20.5%
Coverage: The Morning Paper, TheNextPlatform, Hacker News, HN II, Georgia Tech News I, GT News II
Code: <https://github.com/sslabs-gatech/mosaic/>
5. **Understanding Manycore Scalability of File Systems**
Changwoo Min, Sanidhya Kashyap, **Steffen Maass**, Woon-Hak Kang, and Taesoo Kim.
ATC'16, Denver, CO, June, 2016.
Acceptance rate: 19.0%
Code: <https://github.com/sslabs-gatech/fxmark/>

Workshops

1. **KALEIDOSCOPE: Graph Analytics on Evolving Graphs.**
Steffen Maass and Taesoo Kim.
In the 12th EuroSys Doctoral Workshop Workshop (EuroDW), Porto, Portugal, April, 2018.

Posters

1. **MOSAIC: Processing a Trillion-Edge Graph on a Single Machine.**
Steffen Maass, Changwoo Min, Sanidhya Kashyap, Woon-Hak Kang, Mohan Kumar, and Taesoo Kim.
In the Workshop on Optimization & Big Data (OBD'18), KAUST, Saudi Arabia, Feb, 2018.
Best Contribution Award
2. **DISTCoZ: Tell Me What to Optimize in My Distributed Application**
Steffen Maass, Mohan Kumar, and Taesoo Kim.
NSDI'17 - Poster, Boston, MA, April, 2017.
3. **Network Function Fault Isolation in a Single Address Space**
Mohan Kumar, **Steffen Maass**, and Taesoo Kim.
NSDI'17 - Poster, Boston, MA, April, 2017.

Awards

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| OBD'18 | Best Contribution Award | 02/2018 |
| Eurosys'17 | Best Student Paper Award | 04/2017 |

Travel Grants

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| 1. | 14th USENIX Symposium on Networked Systems Design and Implementation Boston, MA | 03/2017 |
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Invited Talks and Presentations

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| EuroDW'18 | KALEIDOSCOPE: Graph Analytics on Evolving Graphs | Porto, 04/2018 |
| ASPLOS'18 - Lightning Talk | LATR: Lazy Translation Coherence | Williamsburg, 03/2018 |
| OBD'18 - Spotlight Talk | MOSAIC: Processing a Trillion-Edge Graph on a Single Machine | KAUST, 02/2018 |
| Intel ISTC | MOSAIC: Processing a Trillion-Edge Graph on a Single Machine | Atlanta, 06/2017 |
| EuroSys'17 | MOSAIC: Processing a Trillion-Edge Graph on a Single Machine | Belgrade, 04/2017 |

Teaching Experience

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| Graduate Teaching Assistant | Georgia Tech, Atlanta, GA Graduate Teaching Assistant for <i>Computability & Algorithms</i> , <i>Computer Networks</i> , and <i>Advanced Operating Systems</i> . | 2014 – 2018 |
| Teaching Assistant | University of Stuttgart, Germany Teaching Assistant for <i>Distributed Systems</i> & a hands-on class on processor architecture and design. | 2011 – 2013 |

Technical Strengths

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| Languages | C++, C, and Python |
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Professional Service

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| External Reviewer | NSDI'19 |
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