

# Reinhard Richard Munz

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## EDUCATION

- Max Planck Institute for Software Systems (MPI-SWS), Germany** Jul'11–**present**  
Doctoral student, Computer Science  
Enrolled at Technische Universität Kaiserslautern, Germany Oct'14–**present**
- Carnegie Mellon University (CMU), USA** Sep'09–Dec'10  
Master of Science in Information Technology with Specialization in Very Large Information Systems—GPA: 3.87/4.33
- Julius-Maximilians-Universität Würzburg, Germany** Oct'06–Sep'14  
Vordiplom (German Intermediate Diploma), Computer Science—Grade: 1 Apr'08  
(1=excellent, 2=very good, 3=good, 4=pass, 5=fail)

## RESEARCH EXPERIENCE

- Query-based Bookkeeping, Security & Privacy @ MPI-SWS, 1 student & 1 postdoc** May'16–**present**  
Developing methods to improve yield on limited query budgets without reducing result accuracy. Designing and implementing budget tracking solely based on queries, which allows to provide tracking state to analysts without the danger of leaking sensitive information. Paul Francis  
Deepak Garg  
Matteo Maffei
- Private Data Analytics, Security & Privacy @ MPI-SWS, 1 student** Jun'14–**present**  
Investigating practical alternatives to “Differential Privacy” in private data analytics systems. Working towards support of unbounded numbers of queries with bounded result noise contrary to previous approaches using the concepts of query budgets and indefinitely raised noise. Paul Francis
- Triage, Distributed, dependable, and mobile systems @ MPI-SWS, 1 student** May'13–May'14  
Improved user satisfaction through more accurate backend response time prediction. Selective execution of requests with good prognosis raises system goodput.—**Poster at SOSP'13** Allen Clement  
Björn Brandenburg
- Multi-KV, Distributed, dependable, and mobile systems @ MPI-SWS, 3 students** Nov'12–Aug'13  
Built mechanisms for consistency in geo-replicated storage systems.—**Poster at EuroSys'13** Allen Clement
- Work stealing at scale, Programming languages and systems @ MPI-SWS, 2 students** Jan'12–Oct'12  
Enhanced single-machine work stealing schedulers to scale to clusters of machines. Umut Acar
- PCM-KV: A Key-Value Store on Phase Change Memory, CMU, 2 students** Sep'10–Dec'10  
Devised OS mechanisms to handle shortcomings of non-volatile main memory alternatives. David Andersen  
Michael Kaminsky  
Implemented and evaluated wear-leveling memory allocator.—**Technical report**

## PUBLICATIONS

- Persistent, Protected, and Cached: Building Blocks for Main Memory Data Stores**  
I. Moraru, D. Andersen, M. Kaminsky, N. Binkert, N. Tolia, R. Munz, and P. Ranganathan  
*Technical Report CMU-PDL-11-114v2, Carnegie Mellon University Parallel Data Lab* Nov'12

## SKILLS

- Programming Languages:** Java, C#, C++, Python  
**Spoken Languages:** German (mother tongue), English (fluent, CEFR C2)

## HONORS & AWARDS

- ACM SOSP Student Scholarship** Nov'13  
**USENIX OSDI Student Grant** Oct'12  
**Max Weber-Programm, Fellowship for gifted students** Oct'08–Mar'12

## EXTRA-CURRICULAR ACTIVITIES

- “Snack Shop”, MPI-SWS** Apr'13–**present**  
Personal initiative to improve work environment by selling beers and snacks.
- “Allowio” Kolping Zeltlager Amorbach, Germany** 2002–**present**  
Summer camp instructor for ~75 children.