

# Fabio Niephaus

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## Education

- Oct 2014 – present **Master of Science**, *Hasso Plattner Institute*, Potsdam, Germany.  
Majoring in IT-Systems Engineering; *Relevant coursework*: Virtual Machine and Execution Environments, Live Programming Systems, Module systems, Web-based Development Environments, Global Team-Based Product Innovation & Engineering (ME310).
- Oct 2011 – Jul 2014 **Bachelor of Science (with distinction)**, *Hasso Plattner Institute*, Potsdam, Germany.  
Majored in IT-Systems Engineering; *Relevant coursework*: Software Architecture, Software Engineering, Operating Systems, Database Systems, Internet and WWW Technologies, Advanced Techniques in Practical System and Networking Security, Designing Interactive Systems (HCI).
- Aug 2001 – Aug 2010 **German Abitur**, *Grafschafter Gymnasium*, Moers, Germany.

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## Experience

- Jun 2017 – present **Software Engineering Intern**, *Google*, Mountain View, CA, USA.
- Apr 2007 – present **Freelance Software Engineer**, Potsdam, Germany.  
Internet and computer services such as website development or IT administration;  
*Notable clients*: Maton Guitars, Modeagentur Bucksch GmbH & Co. KG.
- Apr 2014 – Jun 2017 **Teaching Assistant**, *Software Architecture Group, HPI*, Potsdam, Germany.  
Mentoring student teams for the Software Architecture and Software Engineering lectures.
- Aug 2015 – Mar 2016 **Site Reliability Engineering Intern**, *Google*, Dublin, Ireland.  
Designed and built an internal customer dashboard for Google's offline storage system and worked on its monitoring and backend components. Facilitated internal Design Thinking training sessions.
- Aug 2012 – Mar 2014 **Public Relations Assistant**, *Hasso Plattner Institute*, Potsdam, Germany.  
Managed website and social media channels.
- Nov 2010 – Jul 2011 **Full Time Intern**, *Maton Guitars*, Melbourne, Australia.

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## Publications

- Aug 2017 **Squeak Makes a Good Python Debugger**.  
F. Niephaus, T. Felgentreff, T. Pape, R. Hirschfeld.  
In Proceedings of the Programming Experience 2017 (PX/17) Workshop, 2017. (to appear)
- Aug 2016 **smalltalkCI: A Continuous Integration Framework for Smalltalk Projects**.  
F. Niephaus, D. Henrichs, M. Taeumel, T. Pape, T. Felgentreff, R. Hirschfeld.  
In Proceedings of the International Workshop on Smalltalk Technologies, 2016.
- Mar 2016 **Matriona: class nesting with parameterization in Squeak/Smalltalk**.  
M. Springer, F. Niephaus, H. Masuhara, R. Hirschfeld.  
In Proceedings of the 15th International Conference on Modularity, 2016.
- Jul 2015 **Call-target-specific Method Arguments**.  
F. Niephaus, M. Springer, T. Felgentreff, T. Pape, R. Hirschfeld.  
In Proceedings of the 10th Implementation, Compilation, Optimization of Object-Oriented Languages, Programs and Systems Workshop (ICOOOLPS), 2015.
- Feb 2015 **ecoControl**, *Design and implementation of a prototype for optimizing heterogeneous energy systems in multi-family residential buildings*.  
Herbst, Maschler, Niephaus, Reimann, Steier, Felgentreff, Lincke, Taeumel, Hirschfeld, Witt.

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## Notable Projects

- Apr 2016 – Aug 2016 **Master's Project on Virtual Execution Environments.**  
Worked on a Smalltalk virtual machine written in RPython. Integrated SQLite, so that programming language and query language are executed by the same VM using the same JIT compiler.
- Oct 2014 – Jul 2015 **ME310 Global Team-based Product Innovation & Engineering.**  
Worked on a design challenge in corporation with Stanford University and University of St. Gallen. Developed a prototype to improve the collaboration between engineers at ThyssenKrupp, using Design Thinking methodologies.
- Oct 2013 – Jan 2015 **Efficient Energy Management for Heterogeneous Energy Systems.**  
Developed a system to optimize the use of energy systems in residential buildings.

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## Scholarships & Awards

- Oct 2011 – *present* **e-fellows.net Scholar.**
- Dec 2011 – Jun 2017 **Scholar of the German National Academic Foundation.**
- Apr 2017 **ACM Student Research Competition Winner**, *«Programming» 2017*, Brussels, Belgium.
- Oct 2014 **Google Award**, *Best Integration of Android Wear*, HackZurich 2014, Zürich, Switzerland.

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## Extracurricular Activities

- Apr 2014 – *present* **Assistant Basketball Coach**, *College Sports*, University of Potsdam.
- Jun 2012 – Jun 2013 **Scholarship Student Representative**, *German National Academic Foundation*.
- Mar 2009 – Aug 2010 **School Council President**, *Grafschafter Gymnasium Moers*.
- Jun 2009 – Jul 2010 **Schüler-Planspiel United-Nations (SPUN).**  
Participated as *representative* and as *commission leader*.
- Aug 2008 **Deutsche SchülerAkademie.**  
Participated in an eXtreme Programming course for gifted pupils.

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## Other

- Languages German (native), English (fluent), French (basic).
- Interests Music, electric and acoustic guitars, basketball, sports, movies, traveling, embedded systems (e.g. Raspberry Pi).
- Memberships ACM, Squeak e.V., CdE e.V.