

# Dominik Moritz

PhD student in Computer Science & Engineering at the University of Washington

## Contact

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[github://domoritz](https://github.com/domoritz)

## Languages

German native  
English proficient

## Programming

Python, C++, Java,  
JavaScript, Go,  
Smalltalk,  
CSS3 & HTML5

## Systems, Frameworks & Techniques

Git, Linux,  $\text{\LaTeX}$ ,  
PostgreSQL, Protobuf,  
Qt, TDD, Testing,  
Prototyping

## Research Interests

My goal is to use a combination of **large-scale systems for data analysis and sophisticated interactive visualizations** to support novel insights and fast exploration of multi-dimensional data. My efforts are leading to systems that extract patterns, detect anomalies, and find root causes of anomalies. The results of this analysis can be explored with interactive visualizations that provides feedback to the system.

## Education

- since 2013 **PhD student** Computer Science & Engineering University of Washington, Seattle, WA  
Advised by Bill Howe and Jeffrey Heer.  
Research focus on distributed database systems and interactive data visualization.
- 2010–2013 **Bachelor of Science** IT-Systems Engineering Hasso-Plattner-Institute, Potsdam, Germany  
Bachelor's thesis: *Algorithms for the Visualization of Software System Evolution*.  
GPA: 4.0 (1.0 in German system)  
Advanced classes on database implementation, visualization algorithms, and logic.

## Awards

- 2013-2014 **Fulbright Scholarship** Bureau of Educational and Cultural Affairs, USA  
Highly competitive, merit-based grant for international educational exchange for students, scholars, teachers and scientists.
- since 2010 **Studienstiftung des Deutschen Volkes** Studienstiftung, Bonn, Germany  
The *German National Academic Foundation* grants prestigious scholarships to students of outstanding academic achievements.
- 2013 **Hasso Plattner scholarship** Hasso Plattner Institute, Potsdam, Germany  
Awarded for excellent academic performance during undergraduate studies.

## Experience

- 2014 **Google** New York City, USA  
*Software Engineering Intern*  
Developed new algorithms for large scale production monitoring system to support more complex queries.  
Algorithm design, large scale software development, profiling, C++.
- 2012–2013 **Open Knowledge Foundation** London, UK  
*Intern and Developer*  
Two-month summer internship and subsequent one-year involvement in development and training for CKAN, a data portal software used by data.gov among many others.  
Distributed teams, agile development methods, large legacy systems, Python

## Publications

### Demonstration of the Myria Big Data Management Service

Daniel Halperin, Victor Teixeira de Almeida, Lee Lee Choo, Shumo Chu, Paraschos Koutris, Dominik Moritz, Jennifer Ortiz, Vaspol Ruamviboonsuk, Jingjing Wang, Andrew Whitaker, Shengliang Xu, Magdalena Balazinska, Bill Howe, Dan Suciu

2014 ACM SIGMOD International Conference on Management of Data, 2014, Snowbird, Utah, USA

### Visualization of Varying Hierarchies by Stable Layout of Voronoi Treemaps

Sebastian Hahn, Jonas Trümper, Dominik Moritz, Jürgen Döllner

5th International Conference on Information Visualization Theory and Applications (IVAPP 2014), 2014