Ben Wiedermann

www.cs.hmc.edu/~benw benw@cs.hmc.edu (909) 607-5330

Computer Science Department 301 Platt Blvd.

Claremont, CA 91711

PROFESSIONAL EXPERIENCE

Assistant Professor July, 2012-Present

Computer Science Department, Harvey Mudd College

Visiting Assistant Professor July, 2011-July, 2012

Computer Science Department, Harvey Mudd College

Postdoctoral Researcher July, 2010-July, 2011

Computer Science Department, Virginia Tech

Postdoctoral Researcher January, 2010-July, 2010

Computer Science Department, UT Austin

Assistant Instructor, Graduate Researcher, Teaching Assistant 2003-2009

Computer Science Department, UT Austin

EDUCATION

Ph.D. in Computer Sciences December, 2009

UT Austin; advised by William Cook

BA in Computer Science May, 2001

Boston University, Magna Cum Laude

TEACHING EXPERIENCE

at Harvey Mudd College

CS 42: Principles and Practice of Computer Science F13, F14, F15

> CL 57: Core Lab—Puzzles^{*} S13

 $S16^{\alpha}$ CS 60: Principles of Computer Science

S12, F12 $^{\beta}$, F13 $^{\beta}$, S14, S15 $^{\gamma}$ CS 70: Data Structures & Program Development

F11, F12, F14, F15, S16 CS 111/181B/181C: Domain Specific Languages*

> CS 181H: System Administration* F14, S15

 $\mathrm{S}16^{\delta}$ LIT 110: Shakespeare

CS 183: Computer Science Clinic all semesters frequently

CS 185: Computer Science Research

* course created by me $^{\alpha}$ course co-taught with Professor Chris Stone $^{\beta}$ course co-taught with Professor Melissa O'Neill Y course co-taught with Professor Julie Medero $^{\delta}$ course co-taught with Professor Ambereen Dadabhoy

PEER-REVIEWED PUBLICATIONS & PANELS

- M. Ringel Morris, A. Begel, B. Wiedermann. Understanding the Challenges Faced By Neurodiverse Software Engineering Employees: Towards a More Inclusive and Productive Technical Workforce. Conference on Computers and Accessibility (ASSETS), 2015. Best paper award
- V. Kashyap, K. Dewey, E. Kuefner, J. Wagner, K. Gibbons, J. Sarracino*, B. Wiedermann, B. Hardekopf. JSAI: A Static Analysis Platform for JavaScript. In Foundations of Software Engineering (FSE), 2014.
- B. Hardekopf, B. Wiedermann, B. Churchill, and V. Kashyap. Widening for Control Flow. In Verification, Model Checking, and Abstract Interpretation (VMCAI), 2014.
- V. Kashyap, J. Sarracino*, J. Wagner, B. Wiedermann, B. Hardekopf. Type Refinement for Static Analysis of JavaScript. In *Dynamic Languages Symposium (DLS)*, 2013.
- C. Lewis, M. Clancey, C. Bailey Lee, M. O'Neill, N. Shah, and B. Wiedermann. Flavors of Active Learning in CS Classrooms (Panel). Consortium for Computing Sciences in Colleges—Southwest Region Conference (CCSC-SW), 2013.
- B. G. Ryder and B. Wiedermann. Language Design and Analyzability: A Retrospective. In *Software: Practice and Experience*, 42(1) pages 3–18, January, 2012.
- W. R. Cook and B. Wiedermann. Remote Batch Invocation for SQL Databases. In *The International Symposium on Database Programming Languages (DBPL)*, 2011.
- V. Kashyap, B. Wiedermann, and B. Hardekopf. Timing- and Termination-Sensitive Secure Information Flow: Exploring a New Approach. In *The IEEE Symposium on Security and Privacy (Oakland)*, 2011.
- B. Lee, B. Wiedermann, M. Hirzel, R. Grimm, and K. S. McKinley. Jinn: Synthesizing Dynamic Bug Detectors for Foreign Language Interfaces. In The ACM SIGPLAN Conference on Programming Language Design and Implementation (PLDI), 2010.
- W. R. Cook, A. Ibrahim, E. Tilevich, and B. Wiedermann. Language Design for Distributed Objects. In The 1st International Workshop on Distributed Objects for the 21st Century (DO21), pages 1–4, 2009.
- B. Wiedermann, A. Ibrahim, and W. R. Cook. Interprocedural Query Extraction for Transparent Persistence. In The ACM SIGPLAN Conference on Object-Oriented Programming, Systems, Languages, and Applications (OOPSLA), pages 19–36, 2008.
- S. M. Blackburn, K. S. McKinley, R. Garner, C. Hoffman, A. M. Khan, R. Bentzur A. Diwan, D. Feinberg, D. Frampton, S. Z. Guyer, M. Hirzel, A. Hosking, M. Jump, H. Lee, J. E. B. Moss, A. Phansalkar, D. Stefanovic, T. VanDrunen, D. von Dincklage, and B. Wiedermann. Wake Up and Smell the Coffee: Evaluation Methodology for the 21st Century. Communications of the ACM (CACM), Research Highlights, 51(8) pages 83–89, August, 2008.
- B. Wiedermann and W. R. Cook. Extracting Queries by Static Analysis of Transparent Persistence. In The ACM SIGPLAN-SIGACT Symposium on Principles of Programming Languages (POPL), pages 199–210, 2007.
- S. M. Blackburn, R. Garner, C. Hoffman, A. M. Khan, K. S. McKinley, R. Bentzur A. Diwan, D. Feinberg, D. Frampton, S. Z. Guyer, M. Hirzel, A. Hosking, M. Jump, H. Lee, J. E. B. Moss, A. Phansalkar, D. Stefanovic, T. VanDrunen, D. von Dincklage, and B. Wiedermann. The DaCapo Benchmarks: Java Benchmarking Development and Analysis. In The ACM SIGPLAN Conference on Object-Oriented Programming, Systems, Languages, and Applications (OOPSLA), pages 169–190, 2006.

BOOKS

- H. Deitel, P. Deitel, J. Liperi, and B. Wiedermann. Python How to Program. Prentice Hall: Upper Saddle Lake, NJ, 2002.
- H. Deitel, P. Deitel, J. Liperi and B. Wiedermann. The Complete Python Training Course. Prentice Hall: Upper Saddle Lake, NJ, 2002.

GRANTS & AWARDS

Spring 2016	Sontag Center, Creativity & Innovation (\$2000; with Ambereen Dadabhoy)
2014 – 2017	NSF "REU Site in Computer Systems" (\$358,068; co-PI with Zach Dodds)
April, 2011	HMC Mellon Award for Faculty Development (\$5000)

INVITED TALKS

ED TALKS	
December, 2014	"What Good Are Programming Languages?" Southern California Programming Languages and Systems Workshop
July, 2014	"Type Refinement for JavaScript" (Dagstuhl) Scripting Languages and Frameworks: Analysis and Verification
February, 2012	"Premature Optimization Is The Root of All SQL" Swarthmore College & Harvey Mudd College
February, 2012	"Modular and Efficient Database Access" Bucknell University
February, 2012	"Keeping Secrets: Language-based Secure Information Flow" Rose-Hulman Institute of Technology
December, 2011	"Modular and Efficient Database Access" Colorado College
December, 2011	"Keeping Secrets: Language-based Secure Information Flow" Colorado College
March, 2011	"Keeping Secrets: Language-based Secure Information Flow" Harvey Mudd College
April, 2010	"Language Support for Modular and Efficient Database Access" The University of British Columbia
January, 2010	"Modular and Efficient Access to Databases" Carleton College
October, 2008	"Interprocedural Query Extraction for Transparent Persistence" OOPSLA 2008 (research paper presentation)
January, 2007	"Extracting Queries by Static Analysis of Transparent Persistence" POPL 2007 (research paper presentation)
August, 2006	"Extracting Queries by Static Analysis of Transparent Persistence" Kansas State University, Massachusetts Institute of Technology, Harvard University, Tufts University & Brown University

PROFESSIONAL SERVICE & MEMBERSHIPS

Program committee member: SRC@PLDI 2016, OOPSLA 2014, SoCalPLs 2014b, 2014a & 2013a, CWIC-SoCal 2014 & 2012, SCAM 2011, PLATEAU 2010.

Workshop organizer: PLMW@PLDI 2016, SoCalPLs 2014a.

Organizing committee member: ICSE 2013.

External Reviewer: TODS 2015, IET Software 2012, PLDI 2011, POPL 2010, OOPSLA 2010, ECOOP 2009, PLDI 2008, PLDI 2007, OOPSLA 2007, CC 2007, ECOOP 2005.

Professional Memberships: The Association for Computing Machinery (ACM), The Council on Undergraduate Research (CUR)