Rob Johnson

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Senior Staff Researcher
VMware Research
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Research Assistant Professor
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Employment

VMware Research	Senior Staff Researcher	August 2019—present
VMware Research	Senior Researcher	April 2017—August 2019
Stony Brook University	Research Assistant Professor of Computer Science	2014—present
Stony Brook University	Assistant Professor of Computer Science	2005—2014
Xerox PARC	Graduate Research Intern	Summer, 2002
IDA-CCS	Research Adjunct Staff	Summers, 1998—2000
National Security Agency	Research Intern	Summer, 1997

Education

UC Berkeley	Computer Science	Ph.D.	2006
UNC Greensboro	Computer Science and Mathematics	B.S.	1998

Peer-Reviewed Publications

1. External-Memory Dictionaries in the Affine and PDAM Models. Michael A. Bender, Alex Conway, Martín Farach-Colton, William Jannen, Yizheng Jiao, Rob Johnson, Eric Knorr, Sara McAllister, Nirjhar Mukherjee, Prashant Pandey, Donald E. Porter, Jun Yuan, Yang Zhan. Transactions on Parallel Computing 2021.
2. Vector Quotient Filters: Overcoming the Time/Space Trade-Off in Filter Design. Prashant Pandey, Alex Conway, Joe Durie, Michael A. Bender, Martín Farach-Colton, and Rob Johnson. SIGMOD 2021.
3. Copy-on-Abundant-Write for Nimble File System Clones. Yang Zhan, Alex Conway, Yizheng Jiao, Nirjhar Mukherjee, Ian Groombridge, Michael A. Bender, Martín Farach-Colton, William Jannen, Rob Johnson, Donald E. Porter, and Jun Yuan. ACM Transactions on Storage 2021.
4. Storage Systems are Distributed Systems (So Verify Them That Way!). Travis Hance, Andrea Lattuada, Chris Hawblitzel, Jon Howell, Rob Johnson, and Bryan Parno. OSDI 2020.
5. SplinterDB: Closing the Bandwidth Gap for NVMe Key-Value Stores. Alex Conway, Abhishek Gupta, Amy Tai, Richard Spillane, Vijay Chidambaram, Martín Farach-Colton, and Rob Johnson. USENIX ATC 2020.

6. Closing the Gap Between Cache-Oblivious and Cache-Adaptive Analysis. Michael Bender, Rezaul Chowdhury, Rathish Das, Rob Johnson, William Kuszmaul, Andrea Lincoln, Quanquan Liu, Jayson Lynch, and Helen Xu. SPAA 2020.
7. Timely Reporting of Heavy Hitters using External Memory. Prashant Pandey[1], Shikha Singh[1], Michael A. Bender, Jonathan W. Berry, Martín Farach-Colton, Rob Johnson, Thomas M. Kroeger, Cynthia Phillips. SIGMOD 2020.
8. How to Copy Files. Yang Zhan, Alex Conway, Yizheng Jiao, Nirjhar Mukherjee, Ian Groombridge, Michael A. Bender, Martín Farach-Colton, William Jannen, Rob Johnson, Donald E. Porter, Jun Yuan. FAST 2020.
9. Flushing Without Cascades. Michael A. Bender, Rathish Das, Martín Farach-Colton, Rob Johnson, and William Kuszmaul. SODA 2020.
10. An Efficient, Scalable and Exact Representation of High-Dimensional Color Information Enabled via de Bruijn Graph Search. Fatemeh Almodaresi, Prashant Pandey, Michael Ferdman, Rob Johnson, and Rob Patro. Journal of Computational Biology, 2019.
11. Filesystem Aging: It's more Usage than Fullness. Alex Conway, Eric Knorr, Yizheng Jiao, Michael Bender, William Jannen, Rob Johnson, Donald Porter, and Martín Farach-Colton. HotStorage 2019.
12. Small Refinements to the DAM Can Have Big Consequences for Data-Structure Design. Michael A. Bender, Alexander Conway, Martín Farach-Colton, William Jannen, Yizheng Jiao, Rob Johnson, Eric Knorr, Sara McAllister, Nirjhar Mukherjee, Prashant Pandey, Donald E. Porter, Jun Yuan, and Yang Zhan. SPAA 2019.
13. An Efficient and Scalable Representation of High-Dimensional Color Information Enabled via de Bruijn Graph Search. Fatemeh Almodaresi, Prashant Pandey, Michael Ferdman, Rob Johnson, and Rob Patro. RECOMB 2019.
14. Engineering a High-Performance GPU B-Tree. Muhammad A. Awad, Saman Ashkiani, Rob Johnson, Martín Farach-Colton, and John D. Owens. PPoPP 2019.
15. Optimal Ball Recycling. Michael A. Bender, Jake Christensen, Alex Conway, Martín Farach-Colton, Rob Johnson, Meng-Tsung Tsai. SODA 2019.
16. Efficient Directory Mutations in a Full-Path-Indexed File System. Yang Zhan, Yizheng Jiao, Donald E. Porter, Alex Conway, Eric Knorr, Martín Farach-Colton, Michael A. Bender, Jun Yuan, William Jannen, And Rob Johnson. ACM Transactions on Storage 2018.
17. Bloom Filters, Adaptivity, and the Dictionary Problem. Michael A. Bender, Martín Farach-Colton, Mayank Goswami, Rob Johnson, Samuel McCauley, Shikha Singh. FOCS 2018.
18. Mantis: A Fast, Small, and Exact Large-Scale Sequence-Search Index. Prashant Pandey, Fatemeh Almodaresi, Michael A. Bender, Michael Ferdman, Rob Johnson and Rob Patro. Cell Systems 2018.
19. Mantis: A Fast, Small, and Exact Large-Scale Sequence-Search Index. Prashant Pandey, Fatemeh Almodaresi, Michael A. Bender, Michael Ferdman, Rob Johnson and Rob Patro. RECOMB 2018. **Fast-tracked for publication in Cell Systems**

[1]Prashant Pandey and Shikha Singh are equal first authors on this paper.

20. The Full Path to Full-Path Indexing. Yang Zhan, Alex Conway, Yizheng Jiao, Eric Knorr, Michael A. Bender, Martín Farach-Colton, William Jannen, Rob Johnson, Donald E. Porter, and Jun Yuan. USENIX FAST 2018. **Nominated for best paper**
21. Squeakr: An Exact and Approximate k-mer Counting System. Prashant Pandey, Michael A. Bender, Rob Johnson and Rob Patro. Bioinformatics, October 2017.
22. deBGR: An Efficient and Near-Exact Representation of the Weighted de Bruijn Graph. Prashant Pandey, Michael A. Bender, Rob Johnson and Rob Patro. ISMB 2017.
23. deBGR: An Efficient and Near-Exact Representation of the Weighted de Bruijn Graph. Prashant Pandey, Michael A. Bender, Rob Johnson and Rob Patro. Bioinformatics, July 2017.
24. Write-Optimized Skip Lists. Michael Bender, Martín Farach-Colton, Rob Johnson, Simon Mauras, Tyler Mayer, Cynthia Phillips and Helen Xu. PODS 2017.
25. A General-Purpose Counting Filter: Making Every Bit Count. Prashant Pandey, Michael A. Bender, and Rob Johnson. SIGMOD 2017.
26. Writes Wrought Right, and Other Adventures in File System Optimization. Jun Yuan, Yang Zhan, William Jannen, Prashant Pandey, Amogh Akshintala, Kanchan Chandnani, Pooja Deo, Zardosht Kasheff, Leif Walsh, Michael A. Bender, Martín Farach-Colton, Rob Johnson, Bradley C. Kuszmaul, and Donald E. Porter. ACM Transactions on Storage, March 2017.
27. File Systems Fated for Senescence? Nonsense, Says Science! Alexander Conway, Ainesh Bakshi, Yizheng Jiao, William Jannen, Yang Zhan, Jun Yuan, Michael A. Bender, Rob Johnson, Bradley C. Kuszmaul, Donald E. Porter, and Martín Farach-Colton. USENIX FAST 2017.
28. Lazy Analytics: Let Other Queries Do the Work For You. William Jannen, Donald E. Porter, Michael A. Bender, Rob Johnson, Bradley C. Kuszmaul, and Martín Farach-Colton. HotStorage 2016.
29. Cache-Adaptive Analysis. Michael Bender, Erik Demaine, Roozbeh Ebrahimi, Jeremy Fineman, Rob Johnson, Andrea Lincoln, Jayson Lynch and Samuel Mccauley. SPAA 2016. **Selected for presentation at Highlights of Algorithms 2017**
30. Anti-Persistence on Persistent Storage: History-Independent Sparse Arrays and Dictionaries. Michael Bender, Jon Berry, Rob Johnson, Thomas M. Kroeger, Samuel McCauley, Cynthia Phillips, Bertrand Simon, Shikha Singh and David Zage. PODS 2016.
31. Optimizing Every Operation in a Write-Optimized File System. Jun Yuan, Yang Zhan, William Jannen, Prashant Pandey, Amogh Akshintala, Kanchan Chandnani, Pooja Deo, Zardosht Kasheff, Michael Bender, Martín Farach-Colton, Rob Johnson, Bradley C. Kuszmaul, and Donald E. Porter. USENIX FAST 2016. **Best paper**
32. The I/O Complexity of Computing Prime Tables. Michael Bender, Rezaul Chowdhury, Alex Conway, Martín Farach-Colton, Pramod Ganapathi, Rob Johnson, Samuel McCauley, Bertrand Simon, and Shikha Singh. LATIN 2016.
33. Games Without Frontiers: Investigating Video Games as a Covert Channel. Bridger Hahn, Rishab Nithyanand, Phillipa Gill, and Rob Johnson. EuroS&P 2016.
34. BetrFS: Write-Optimization in a Kernel File System. William Jannen, Jun Yuan, Yang Zhan, Amogh Akshintala, John Esmet, Yizheng Jiao, Ankur Mittal, Prashant Pandey, Phaneendra Reddy, Leif Walsh, Michael A. Bender, Martín Farach-Colton, Rob Johnson, Bradley C. Kuszmaul, and Donald E. Porter. ACM Transactions on Storage, 2015.

35. Tracking Network Events with Write Optimized Data Structures. Helen Xu, Nolan Donoghue, Bridger Hahn, Rob Johnson, Thomas Kroeger and David Zage. BADGERS 2015.
36. Fixing Races for Good: Serializable File-System Access for UNIX. Xiang Cai, Rucha Lale, Xin Cheng Zhang, and Rob Johnson. ASIACCS 2015.
37. BetrFS: A Right-Optimized Write-Optimized File System. William Jannen, Jun Yuan, Yang Zhan, Amogh Akshintala, John Esmet , Yizheng Jiao, Ankur Mittal, Prashant Pandey, Phaneendra Reddy, Leif Walsh , Michael Bender, Martín Farach-Colton, Rob Johnson, Bradley C. Kuszmaul, and Donald E. Porter. USENIX FAST 2015. **Runner up for best paper**
38. CS-BuFLO: A Congestion Sensitive Website Fingerprinting Defense. Xiang Cai, Rishab Nithyanand and Rob Johnson. WPES 2014.
39. Glove: A Bespoke Website Fingerprinting Defense. Rishab Nithyanand, Xiang Cai and Rob Johnson. WPES 2014.
40. A Systematic Approach to Developing and Evaluating Website Fingerprinting Defenses. Xiang Cai, Rishab Nithyanand, Tao Wang, Ian Goldberg, and Rob Johnson. ACM CCS 2014.
41. Effective Attacks and Provable Defenses for Website Fingerprinting. Tao Wang, Xiang Cai, Rishab Nithyanand, Rob Johnson, and Ian Goldberg. USENIX Security 2014.
42. Cache-Adaptive Algorithms. Michael A. Bender, Roozbeh Ebrahimi, Jeremy T. Fineman, Golnaz Ghasemiesfeh, Rob Johnson, and Samuel McCauley. SODA 2014.
43. The Password Allocation Problem: Strategies for Reusing Passwords Effectively. Rishab Nithyanand and Rob Johnson. WPES 2013.
44. Gone, But Not Forgotten: The Current State of Private Computing. Aseem Rastogi, Jun Yuan and Rob Johnson. IEEE Web 2.0 Security and Privacy Workshop 2013.
45. Types and Access Controls for Cross-Domain Security in Flash. Aseem Rastogi, Avik Choudhuri, and Rob Johnson. APLAS 2012.
46. Touching from a Distance: Website Fingerprinting Attacks and Defenses. Xiang Cai, Xin Cheng Zhang, Brijesh Joshi, and Rob Johnson. ACM CCS 2012.
47. Compiler Support for Collaborative Worm Defense. Jun Yuan and Rob Johnson. IEEE SCAM 2012.
48. Don't Thrash: How to Cache your Hash on Flash. Michael Bender, Martín Farach-Colton, Rob Johnson, Russell Kraner, Bradley Kuszmaul, Dzejla Medjedovic, Pablo Montes, Pradeep Shetty, Richard Spillane, and Erez Zadok. VLDB 2012.
49. PhorceField: A Phish-Proof Password Ceremony. Michael Hart, Claude Castille, Manoj Harpalani, Jonathan Toohill, and Rob Johnson. The 27th Annual Computer Security Applications Conference (ACSAC 2011).
50. Don't Thrash: How to Cache your Hash on Flash. Michael Bender, Martín Farach-Colton, Rob Johnson, Bradley Kuszmaul, Dzejla Medjedovic, Pablo Montes, Pradeep Shetty, Richard Spillane, and Erez Zadok. HotStorage 2011.
51. Text Classification for Enterprise Data Loss Prevention. Michael Hart, Pratyusa Manadhata, and Rob Johnson. Privacy Enhancing Technologies Symposium (PETS) 2011.

52. Language of Vandalism: Improving Wikipedia Vandalism Detection via Stylometric Analysis. Manoj Harpalani, Sandesh Singh, Michael Hart, Rob Johnson and Yejin Choi. The 49th Annual Meeting of the Association for Computational Linguistics: Human Language Technologies, 2011.
53. Homomorphic Signatures for Digital Photographs. Rob Johnson, Leif Walsh, and Michael Lamb. Financial Cryptography and Data Security 2011.
54. Implementing a Key Recovery Attack on the High-Bandwidth Digital Content Protection Protocol. Mikhail Rubnich, Andres DelaCruz, and Rob Johnson. The 7th IEEE International Workshop on Digital Rights Management Impact on Consumer Communications (DRM), 2011.
55. Prevention and Reaction: Defending Privacy in the Web 2.0. Michael Hart and Rob Johnson. W3C Workshop on Privacy and Data Usage Control, 2010.
56. Wiki Vandalysis - Wikipedia Vandalism Analysis. Manoj Harpalani, Thanadit Phumprao, Megha Bassi, Michael Hart, and Rob Johnson. The 4th International Workshop on Uncovering Plagiarism, Authorship, and Social Software Misuse, 2010.
57. iTag: A Personalized Blog Tagger. Michael Hart, Rob Johnson, and Amanda Stent. ACM Conference on Recommender Systems, 2009.
58. Usable Privacy Controls for Blogs. Michael Hart, Claude Castille, Rob Johnson, and Amanda Stent. IEEE Symposium on Social Intelligence and Networking, 2009.
59. Pre-Patched Software. Jianing Guo, Jun Yuan, and Rob Johnson. HotSec 2009.
60. Exploiting Unix File-System Races via Algorithmic Complexity Attacks. Xiang Cai, Ethan Gui, and Rob Johnson. IEEE Symposium on Security and Privacy, 2009.
61. A Practical Mimicry Attack Against Powerful System-Call Monitors. Chetan Parampelli, R. Sekar, and Rob Johnson. ASIACCS, March 2008.
62. More Content - Less Control: Access Control in the Web 2.0. Michael Hart, Rob Johnson, and Amanda Stent. Proceedings of the IEEE Web 2.0 Security and Privacy Workshop 2007.
63. RICH: Automatically Protecting Against Integer-Based Vulnerabilities. David Brumley, Tzi-cker Chiueh, Robert Johnson, Huijia Lin, and Dawn Song. NDSS 2007.
64. Deflation-Secure Web Metering. Rob Johnson and Jessica Staddon. International Journal of Information and Computer Security, 2007.
65. Flow-Insensitive Type Qualifiers. Jeffrey S. Foster, Rob Johnson, John Kodumal, and Alex Aiken. ACM Transactions on Programming Languages and Systems, 2006.
66. Fixing Races for Fun and Profit: How to abuse atime. Nikita Borisov, Rob Johnson, Naveen Sastry, and David Wagner. USENIX Security 2005.
67. Finding User/Kernel Pointer Bugs With Type Inference. Rob Johnson and David Wagner. USENIX Security 2004.
68. FAIR: Fair Audience InfeRence. Rob Johnson and Jessica Staddon. Digital Rights Management: ACM CCS-9 Workshop, November 2002.
69. Multiplicative Differentials. Nikita Borisov, Monica Chew, Rob Johnson, and David Wagner. Fast Software Encryption 2002.

70. Homomorphic Signature Schemes. Robert Johnson, David Molnar, Dawn Song, and David Wagner. Topics in Cryptology - The Cryptographer's Track at the RSA Conference, February 2002.
71. A Cryptanalysis of the High-bandwidth Digital Content Protection System. Scott Crosby, Ian Goldberg, Rob Johnson, Dawn Song, and David Wagner. ACM Workshop on Security and Privacy in Digital Rights Management, November 2001.
72. On Union-closed Families, I. Rob Johnson and Theresa Vaughan. Journal of Combinatorial Theory, Series A 85, pp. 112–119.

Other Articles

1. Yang Zhan, Alex Conway, Nirjhar Mukherjee, Ian Groombridge, Martín Farach-Colton, Rob Johnson, Yizheng Jiao, Michael A. Bender, William Jannen, Donald E. Porter, and Jun Yuan. How to Not Copy Files. USENIX ;login:, Fall 2020, Vol. 45, No. 3.
2. Alex Conway, Ainesh Bakshi, Yizheng Jiao, Yang Zhan, Michael A. Bender, William Jannen, Rob Johnson, Bradley C. Kuszmaul, Donald E. Porter, Jun Yuan, and Martín Farach-Colton. How to Fragment Your File System. USENIX ;login:, Summer 2017, Vol. 42, No. 2.
3. Michael A. Bender, Martín Farach-Colton, William Jannen, Rob Johnson, Bradley C. Kuszmaul, Donald E. Porter, Jun Yuan, and Yang Zhan. An Introduction to B^{ε}-trees and Write-Optimization. USENIX ;login:, October 2015, Vol. 40, No. 5.

Patents

- Methods, apparatus, and program products for inferring service usage. Rob Johnson and Jessica Staddon. Patent Numbers 7,296,158 (2007) and 7,363,244 (2008)
- System and method for managing transactions for multiple data store nodes without a central log. Wenguang Wang, Abhishek Gupta, Kapil Chowksey, Richard P. Spillane, and Rob Johnson. Patent Number US10592530B2 (2020).
- System and method for managing storage transaction requests. Abhishek Gupta, Richard P. Spillane, Kapil Chowksey, Rob Johnson, Wenguang Wang. Patent Number US10452496B2.

Software

- Co-author of **CQual**, a tool for finding security vulnerabilities and other bugs in C programs.
- Co-author of **Oink**, a tool for finding security vulnerabilities and other bugs in C/C++ programs.
- Co-author of **BetrFS**, an open-source write-optimized Linux file system.
- Author of **Be-Tree**, an open-source B^{ε}-tree.
- Co-author of **CQF**, an open-source counting quotient filter.
- Co-author of **Squeakr**, an open-source, space-efficient k-mer counter.
- Co-author of **DeBGR**, an open-source, space-efficient de Bruijn graph representation.
- Co-author of **VeriBetrFS**, an open-source, verified, write-optimized file system.
- Co-author of **SplinterDB**, an extremely high-performance key-value store.

Program Committee Service

- USENIX Conference File and Storage Technologies (USENIX FAST), 2021, 2019.
- IEEE Symposium on Security and Privacy, 2018, 2017, 2010.
- USENIX Security Conference, 2015, 2011.
- ACM Conference on Computer and Communications Security (ACM CCS), 2014, 2013, 2009, 2008.
- Network and Distributed System Security Symposium (NDSS), 2012.
- WWW, 2016.
- ACM International Systems and Storage Conference (SYSTOR), 2021.
- SIAM-ACM Symposium on Algorithmic Principles of Computer Systems (APoCS), 2021.
- SIAM Conference on Applied and Computational Discrete Algorithms (ACDA), 2021.
- European Symposium on Algorithms (ESA), Algorithm Engineering and Experiments Track, 2019.
- Symposium on Simplicity in Algorithms (SOSA), 2020.
- Latin American Theoretical Informatics Symposium (LATIN), 2017.
- Financial Cryptography and Data Security Workshop, 2010.
- IEEE Web 2.0 Privacy and Security Workshop, 2013, 2010, 2009, 2008.
- Conference on Detection of Intrusions and Malware & Vulnerability Assessment (DIMVA), 2014.
- IEEE Conference on Big Data, 2013.
- IEEE Working Conference on Source Code Analysis and Manipulation (IEEE SCAM), 2013.
- Conference on Privacy, Security and Trust, 2013.
- Conference on Cryptology and Network Security (CANS), 2016.

Current Externally Funded Projects

- Co-PI: NSF. CCF-BSF: AF: Small: Collaborative Research: The Dictionary Problem Considered, $333K, with Michael Bender and Martín Farach-Colton. 9/2017-8/2020.

Past Externally Funded Projects

- Co-PI: NSF. CSR: Medium: Collaborative Research: FTFS: A Read/Write-optimized Fractal Tree File System, $624K, with Michael Bender, Martín Farach-Colton, Bradley Kuszmaul, and Don Porter. 10/2014-9/2019.
- PI: NSF. XPS: FULL: CCA: Collaborative Research: Cache-Adaptive Algorithms: How to Share Core among Many Cores, $800K, with Michael Bender and Rezaul Chowdhury. 8/2014-7/2019.
- Co-PI: NSF. BIGDATA: Mid-Scale: DCM: Collaborative Research: Eliminating the Data Ingestion Bottleneck in Big Data Applications, $1.2M, with Michael Bender. 2/2013-1/2019.

- Co-PI: Sandia National Labs subcontract. Advanced Data Structures for Improved Cyber Resilience and Awareness in Untrusted Environments, $270K, with Michael Bender. 9/2014-8/2017.
- Co-PI: NSF. BIGDATA: Small: DCM: Collaborative Research: An efficient, versatile, scalable, and portable storage system for scientific data containers, $444K, with Erez Zadok and Michael Bender. 7/2013-6/2017.
- Co-PI: NYSTAR Write-optimization for secure smart grid storage, $40K, with Erez Zadok. 2/2016-7/2016.
- Co-PI: Long Island Regional Economic Development Council SGRID3 Grant. Secure and Private Smart and Micro-Grid Data in Transit and Storage, $225K, with Erez Zadok. 1/2014-12/2014.
- Co-PI: DoE Grant. Route 110 Corridor Smart Grid Demonstration Project, $14M. 3/2010-2/2015.
- PI: IUCRC Symantec Grant. Enterprise Data Leak Prevention, $32K. 10/2009-9/2010.
- PI: Computer Associates Grant. Anonymous Authentication with Federated Identity, $80K. 9/2008-8/2009.
- Co-PI: NSF IIS Grant 0713211. Content-Based Access Control for Blogs and Social Networks, $450K, with Amanda Stent. 9/2007-8/2010.
- PI: NSF CyberTrust Grant 0627645. Authenticating Reality, $350K, with Michael Bender and Dimitris Samaras. 10/2006-9/2010.

Departmental and University Service and Awards

- Computer Science Honors Program Director, Fall 2007 – Spring 2017
- Stony Brook Computer Science Department Graduate Teaching Award, 2012.
- Stony Brook Computer Science Department Undergraduate Teaching Award, 2010.

Teaching

- CSE 690. Theory of Cryptography, Fall 2007.
- CSE 608. Topics in Security: Software Security, Fall 2005.
- CSE 548. Analysis of Algorithms, Spring 2016, Fall 2012.
- CSE 509. System Security, Fall 2013, Fall 2010, Spring 2009, Spring 2007, Spring 2006.
- CSE 508. Network Security, Spring 2013, Spring 2011, Fall 2009.
- CSE 409. System Security, Fall 2015, Fall 2011, Fall 2010, Spring 2009.
- CSE 408. Network Security, Spring 2014, Spring 2011, Fall 2009, Fall 2006.
- CSE 373. Analysis of Algorithms, Spring 2016, Fall 2015.
- CSE 312. Legal and Ethical Issues in IT, Spring 2014.
- CSE 150. Honors Foundations of Computer Science, Fall 2009, Fall 2008, Fall 2007.

Interns (5) Yang Zhan (2017), Alex Conway (2018, co-advised with Ittai Abraham and Vijay Chidambaram), Andrea Lincoln (2018), Travis Hance (2019-2020, co-advised with Jon Howell), Andrea Lattuada (2019, 2020, co-advised with Jon Howell), Jialin Li (2020, co-advised with Jon Howell)

Doctoral Students (6) Xiang Cai (graduated with PhD August 2014), Michael Hart (graduated with PhD May 2011), Rishab Nithyanand (with Phillipa Gill, graduated with PhD November 2016), Prashant Pandey (with Michael Bender, graduated with PhD November 2018), Aseem Rastogi (transferred to University of Maryland), Jun Yuan (graduated with PhD August 2016)

Masters Students (25) Anirudh Aithal, Andres DelaCruz, Matthew Gruen, Thomas Groh, Anunay Gupta, Manoj Harpalani, Manisha Kamal, Russell Kraner, Chaitanya Krishnamurthy, Varun Loiwal, Chris Payne, Shishir Randive, Chaitanya Ravi, Mikhail Rubnich, Ali Sayyah, Saurabh Shah, Santosh Subramanian, Paul Talamo, Jared Verdi, Kiron Vijayasankar, Ujjwal Wadhawan, Chris Wischerth, Wenbin Zhang, Xin Cheng Zhang, Tony Zheng

Undergraduate Research Advisees (23) Austin Borger, Dave Butala, Claude Castille, Jake Christensen, Matthew Cordaro, Andres DelaCruz, Chris Digiamo, Jianing Guo, Yuwei Gui, Bridger Hahn, Brijesh Joshi, Nazia Khan, Russell Kraner, Renan Lacerda, Michael Lamb, Jeffrey Mezic, Ali Mirsaidi, Chris Payne, Daniel Pflughoft, Pat Regan, Leif Walsh, Xinwen Wang, Xin Cheng Zhang

Advisor (1) David Wagner (UC Berkeley)