

2021 BOARD NOMINEE

Andrew Myers

Professor, Computer Science
Cornell University



Awards and Honors and Year Received

- ACM Fellow, 2013
- Best/distinguished/test of time paper awards: POPL'99, SOSP'01, SOSP'07, CIDR'13, PLDI'13, and PLDI'15.

Involvement in CRA Activities

Not directly.

Other Relevant Experience

- Faculty in Cornell Computer Science Department, 1999-present
- Editor (or co-Editor) in Chief of Journal of Computer Security (2013-2016) and ACM TOPLAS (2016-present)
- Program committee chair for POPL 2018, CCS 2016, IEEE Security and Privacy 2009
- Member of DARPA Information Security and Technology group (ISAT), 2005-2008
- Software engineer, Silicon Graphics Inc., 1988-1992

Research Interests

Programming languages
Computer security
Systems

Personal Statement

I would like to help CRA promote cybersecurity research, particularly forward-looking research that leads to software and hardware that is more secure. Too much of the funding and creativity goes into near-term attacks and defenses that are leaving the US and the world vulnerable. More advocacy seems to be needed, aimed both at government funding agencies and in the research community itself. My cross-cutting research on language-based security and systems for enforcing it gives me some credibility across multiple involved research communities.

CURRICULUM VITAE

ANDREW C. MYERS

Professor
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Citizenship: USA

Education

Ph.D. Massachusetts Institute of Technology, Computer Science, 1999
S.M. Massachusetts Institute of Technology, Computer Science, 1994
B.S. Stanford University, Physics and Computer Science, 1988

Academic Appointments

1999 Assistant Professor, Cornell University, Department of Computer Science
2004 Associate Professor, Cornell University, Department of Computer Science
2010 Professor, Cornell University, Department of Computer Science

Related Experience

1988–1990 Engineer, Silicon Graphics Inc. (SGI), Mountain View, CA
Summer 1992 Research Intern, DEC Systems Research Center, Palo Alto

Awards and Fellowships

2015 Dorothy and Fred Chau Excellence in Teaching Award, Cornell College of Engineering
2013, 2015 ACM SIGPLAN PLDI Distinguished Paper Awards
2013 Best Paper Award, CIDR 2013.
2010 Provost's Distinguished Scholarship Award, Cornell University
2010 James and Mary Tien Excellence in Teaching Award, Cornell College of Engineering
2009 ACM SIGPLAN Most Influential Paper Award, for POPL 1999
2007 Best Paper Award, 21st ACM Symposium on Operating Systems Principles
2002 NSF CAREER Award
2002 Alfred P. Sloan Research Fellowship
2002 Abraham T. C. Wong Excellence in Teaching Award, Cornell College of Engineering
2001 Best Paper Award, 18th ACM Symposium on Operating Systems Principles
1999 George M. Sprowls Award for outstanding Ph.D. thesis in the MIT EECS Dept.

Refereed Publications

Journal articles and book chapters

1. Danfeng Zhang, Andrew C. Myers, Dimitrios Vytiniotis, and Simon Peyton-Jones. SHErrLoc: A static holistic error locator. *ACM Trans. on Programming Languages and Systems*, 39(4):18, Aug. 2017.
2. Jed Liu, Owen Arden, Michael D. George, and Andrew C. Myers. Fabric: Building open distributed systems securely by construction. *Journal of Computer Security*, 25(4–5):319–321, May 2017.
3. Alvin Cheung, Samuel Madden, Owen Arden, and Andrew C. Myers. Automatic partitioning of database applications. *38th Int'l Conference on Very Large Databases (PVLDB)*, 5(11):1471–1482, August 2012.
4. Aslan Askarov and Andrew C. Myers. Attacker control and impact for confidentiality and integrity. *Logical Methods in Computer Science*, 7(3), Sept. 2011.
5. Michael R. Clarkson, Andrew C. Myers, and Fred B. Schneider. Quantifying information flow with beliefs. *Journal of Computer Security*, 17(5):655–701. 2009.
6. Alan Shieh, Andrew C. Myers, E. Gün Sirer. A stateless approach to connection-oriented protocols *ACM Transactions on Computing Systems*, 26(3), Sept. 2008.

7. Lantian Zheng and Andrew C. Myers. Dynamic security labels and static information flow. *International Journal of Information Security*, 6(2), 2007.
8. Andrew C. Myers, Andrei Sabelfeld, and Steve Zdancewic. Enforcing robust declassification and qualified robustness. *Journal of Computer Security*, 14(2):157–196, 2006.
9. Andrei Sabelfeld and Andrew C. Myers. Language-based information-flow security. *IEEE Journal on Selected Areas in Communications*, 21(1):1–14, Jan. 2003.
10. Steve Zdancewic and Andrew C. Myers. Secure information flow via linear continuations. *Higher Order and Symbolic Computation*, 15(2–3):209–234, Sept. 2002.
11. Steve Zdancewic, Lantian Zheng, Nathaniel Nystrom, and Andrew C. Myers. Secure program partitioning. *ACM Transactions on Computer Systems*, 20(3):283–328, Aug. 2002.
12. Andrew C. Myers and Barbara Liskov. Protecting privacy using the decentralized label model. *ACM Transactions on Software Engineering and Methodology*, 9(4):410–442, Oct. 2000.
13. Barbara Liskov, Mark Day, Sanjay Ghemawat, Robert Gruber, Umesh Maheshwari, Andrew C. Myers, and Liuba Shrira. The language-independent interface of the Thor persistent object system. *Object-Oriented Multidatabase Systems*, pp. 570–588. Prentice Hall, 1996.
14. Mark Day, Barbara Liskov, Umesh Maheshwari, and Andrew C. Myers. References to remote mobile objects in Thor. *ACM Letters on Programming Languages and Systems*, 2(1–4):115–126, Mar.–Dec. 1993.
15. Zeljko Bajzer, Andrew C. Myers, Salah S. Sedarous, Franklyn G. Prendergast. Pade-Laplace method for analysis of fluorescence intensity decay. *Biophysical Journal*, 56:79–93, July 1989.
16. Zeljko Bajzer, Stanimir Vuk-Pavlovic, Andrew C. Myers. Binding, internalization, and intracellular processing of proteins interacting with recycling receptors: A kinetic analysis. *Journal of Biological Chemistry*, 264(23):13623–13631, Aug. 1989.
17. Andrew C. Myers, Stanimir Vuk-Pavlovic, John S. Kovach. Binding, internalization, and intracellular processing of protein ligands: derivation of rate constants by computer modeling. *Journal of Biological Chemistry*, 262(14):6494–6499, May 1987.

Other peer-reviewed publications

18. Isaac Sheff, Xinwen Wang, Robbert van Renesse, and Andrew C. Myers. Heterogeneous Paxos. OPODIS, December 2020.
19. Yizhou Zhang, Guido Salvaneschi, and Andrew C. Myers. Handling bidirectional control flow. 2020 ACM SIGPLAN Conf. on Object-Oriented Programming, Systems, Languages and Applications (OOPSLA), November 2020.
20. Ethan Cecchetti, Siqui Yao, Haobin Ni, and Andrew C. Myers. Securing smart contracts with information flow. 3rd Int’l Symp. on Foundations and Applications of Blockchain (FAB), April 2020.
21. Ethan Cecchetti, Siqui Yao, Haobin Ni, and Andrew C. Myers. Securing smart contracts with information flow. 3rd Int’l Symp. on Foundations and Applications of Blockchain (FAB), April 2020.
22. Mulong Luo, G. Edward Suh, and Andrew C. Myers. Stealthy tracking of autonomous vehicles with cache side channels. 29th USENIX Security Symp., 2020.
23. Drew Zagieboylo, G. Edward Suh, and Andrew C. Myers. Using information flow to design an ISA that controls timing channels. 32nd IEEE Computer Security Foundations Symp. (CSF), June 2019.
24. Matthew Milano, Rolph Recto, Tom Magrino, and Andrew C. Myers. A tour of Gallifrey, a language for geodistributed programming. 3rd Summit on Advances in Programming Languages (SNAPL), May 2019.
25. Tom Magrino, Jed Liu, Nate Foster, Johannes Gehrke, and Andrew C. Myers. Efficient, consistent distributed computation with predictive treaties. *ACM SIGOPS/EuroSys European Conf. on Computer Systems (EuroSys)*, March 2019.
26. Yizhou Zhang and Andrew C. Myers. Abstraction-safe effect handlers via tunneling. *45th ACM Symp. on Principles of Programming Languages (POPL)*, January 2019.
27. Andrew Ferraiuolo, Mark Zhao, Andrew C. Myers, and G. Edward Suh. Hyperflow: A processor architecture for nonmalleable, timing-safe information-flow security. *25th ACM Conf. on Computer and Communications Security (CCS)*, October 2018.

28. Jed Liu, Joe Corbett-Davies, Andrew Ferraiuolo, Alexander Ivanov, Mulong Luo, G. Edward Suh, Andrew C. Myers, and Mark Campbell. Secure autonomous cyber-physical systems through verifiable information flow control. *ACM Workshop on Cyber-Physical Systems Security & Privacy (CPS-SPC)*, October 2018.
29. Matthew P. Milano and Andrew C. Myers. MixT: a language for mixing consistency in geodistributed transactions. *39th ACM SIGPLAN Conf. on Programming Language Design and Implementation (PLDI)*, June 2018.
30. Ethan Cecchetti, Andrew C. Myers, and Owen Arden. Nonmalleable information flow control. *24th ACM Conf. on Computer and Communications Security (CCS)*, Oct. 2017.
31. Yizhou Zhang and Andrew C. Myers. Familia: unifying interfaces, type classes, and family polymorphism. *2017 ACM SIGPLAN Conf. on Object-Oriented Programming, Systems, Languages and Applications (OOPSLA)*, Oct. 2017.
32. Andrew Ferraiuolo, Weizhe Hua, Andrew C. Myers, and G. Edward Suh. Secure Information Flow Verification with Mutable Dependent Types. *54th Design Automation Conference (DAC)*, June 2017.
33. Ian Arawjo, Cheng-Yao Wang, Andrew C. Myers, Erik Andersen, and François Guimbretière. Teaching programming with gamified semantics. *ACM CHI Conf. on Human Factors in Computing Systems*, May 2017.
34. Andrew Ferraiuolo, Rui Xu, Danfeng Zhang, Andrew C. Myers, and G. Edward Suh. Verification of a practical hardware security architecture. *Int'l Conf. on Architectural Support for Programming Languages and Operating Systems (ASPLOS)*, April 2017.
35. Isaac Sheff, Tom Magrino, Jed Liu, Andrew C. Myers, and Robbert Van Renesse. Safe serializable secure scheduling: transactions and the trade-off between security and consistency. *23rd ACM Conf. on Computer and Communications Security (CCS)*, pp. 229–241, October 2016.
36. Owen Arden and Andrew C. Myers. A calculus for flow-limited authorization. *29th IEEE Symp. on Computer Security Foundations (CSF)*, pp. 135–149, June 2016.
37. Yao Wang, Andrew Ferraiuolo, Danfeng Zhang, Andrew C. Myers, and G. Edward Suh. SecDCP: Secure dynamic cache partitioning for efficient timing channel protection. *53rd Design Automation Conference (DAC)*, pp. 74:1-74:6, June 2016.
38. Yizhou Zhang, Guido Salvaneschi, Quinn Beightol, Barbara Liskov, and Andrew C. Myers. Accepting blame for safe tunneled exceptions. *37th ACM Conference on Programming Language Design and Implementation (PLDI)*, June 2016.
39. Yao Wang, Andrew Ferraiuolo, Danfeng Zhang, Andrew C. Myers, and G. Edward Suh. Secure dynamic cache partitioning for efficient timing channel protection. *53rd Design Automation Conference (DAC)*, June 2016.
40. Andrew Ferraiuolo, Yao Wang, Danfeng Zhang, Andrew C. Myers, and G. Edward Suh. Lattice priority scheduling: low-overhead timing channel protection for a shared memory controller. *22nd Int'l Symp. on High Performance Computer Architecture (HPCA)*, March 2016.
41. Owen Arden, Jed Liu, and Andrew C. Myers. Flow-limited authorization. *28th IEEE Symp. on Computer Security Foundations (CSF)*, July 2015.
42. Danfeng Zheng, Andrew C. Myers, Dimitrios Vytiniotis, Simon Peyton-Jones. Diagnosing type errors with class. *36th ACM Conference on Programming Language Design and Implementation (PLDI)*, June 2015. SIGPLAN Distinguished Paper Award.
43. Yizhou Zhang, Matthew C. Loring, Guido Salvaneschi, Barbara Liskov, and Andrew C. Myers. Lightweight, flexible object-oriented generics. *36th ACM Conference on Programming Language Design and Implementation (PLDI)*, June 2015.
44. Chinawat Isradisaikul and Andrew C. Myers. Finding counterexamples from parsing conflicts. *36th ACM Conference on Programming Language Design and Implementation (PLDI)*, June 2015.
45. Danfeng Zhang, Yao Wang, G. Edward Suh, and Andrew C. Myers. A hardware design language for timing-sensitive information-flow security. *20th Int'l Conf. on Architectural Support for Programming Languages and Operating Systems (ASPLOS)*, March 2015.
46. Lantian Zheng and Andrew C. Myers. A language-based approach to secure quorum replication. *9th ACM SIGPLAN Workshop on Programming Languages and Analysis for Security (PLAS 2014)*, July 2014.

47. Jed Liu and Andrew C. Myers. Defining and enforcing referential security. *3rd Int'l Conf. on Principles of Security and Trust (POST'14)*, pp. 199-219, April 2014.
48. Jed Liu, Tom Magrino, Owen Arden, Michael D. George, and Andrew C. Myers. Warranties for faster strong consistency. *11th USENIX Symposium on Networked Systems Design and Implementation (NSDI)*, pp. 503-517, April 2014.
49. Alvin Cheung, Samuel Madden, Armando Solar-Lezama, Owen Arden, and Andrew C. Myers. Using program analysis to improve database applications. *IEEE Data Bulletin*, pp. 48-59, 37(1), March 2014.
50. Danfeng Zhang and Andrew C. Myers. Toward general diagnosis of static errors. *ACM Symp. on Principles of Programming Languages (POPL)*, January 2014.
51. Chinawat Isradisaikul and Andrew C. Myers. Reconciling exhaustive pattern matching with objects. *34th ACM Conference on Programming Language Design and Implementation (PLDI)*, pp. 343-353, June 2013. SIGPLAN Distinguished Paper Award.
52. Alvin Cheung, Samuel Madden, Owen Arden, and Andrew C. Myers. StatusQuo: Making familiar abstractions perform using program analysis. *Conference on Innovative Data Systems Research (CIDR)*, January 2013. Best paper award.
53. Danfeng Zhang, Aslan Askarov, and Andrew C. Myers. Language-based control and mitigation of timing channels. *33rd ACM Conference on Programming Language Design and Implementation (PLDI)*, June 2012.
54. Owen Arden, Michael D. George, Jed Liu, K. Vikram, Aslan Askarov, and Andrew C. Myers. Sharing mobile code securely with information flow control. *33rd IEEE Symposium on Security and Privacy (Oakland)*, May 2012.
55. Danfeng Zhang, Aslan Askarov, and Andrew C. Myers. Predictive mitigation of timing channels in interactive systems. *18th ACM Conf. on Computer and Communications Security (CCS)*, October 2011.
56. Aslan Askarov and Andrew C. Myers. Predictive black-box mitigation of timing channels. *17th ACM Conf. on Computer and Communications Security (CCS)*, pp. 297-307, October 2010.
57. Xin Qi and Andrew C. Myers. Homogeneous family sharing. *25th ACM Conference on Object-Oriented Programming Languages, Systems, Languages, and Applications (OOPSLA)*, pp. 520-538, October 2010.
58. Aslan Askarov, Andrew C. Myers. A semantic framework for declassification and endorsement. *19th European Symp. on Programming (ESOP)*, March 2010.
59. Jed Liu, Michael D. George, K. Vikram, Xin Qi, Lucas Wayne, and Andrew C. Myers. Fabric: A platform for secure distributed computation and storage. *22nd ACM Symp. on Operating Systems Principles (SOSP)*, pp. 321-334, October 2009.
60. Xin Qi and Andrew C. Myers. Sharing classes between families. *ACM SIGPLAN Conference on Programming Language Design and Implementation (PLDI)*, pp. 281-292, June 2009.
61. Xin Qi and Andrew C. Myers. Masked types for sound object initialization. *ACM Symp. on Principles of Programming Languages (POPL)*, pp. 53-65, Jan. 2009.
62. Stephen Chong and Andrew C. Myers. End-to-end enforcement of erasure and declassification. *IEEE Symp. on Computer Security Foundations (CSF)*, pp. 98-111, June 2008.
63. Lantian Zheng and Andrew C. Myers. Secure nonintrusive web encryption through information flow. *3rd ACM SIGPLAN Workshop on Programming Languages and Analysis for Security (PLAS)*, pp. 125-134, June 2008.
64. Michael R. Clarkson, Stephen Chong, and Andrew C. Myers. Civitas: Toward a secure voting system. *IEEE Symp. on Security and Privacy (Oakland)*, pp. 354-368, May 2008.
65. Stephen Chong, Jed Liu, Andrew C. Myers, Xin Qi, K. Vikram, Lantian Zheng, and Xin Zheng. Secure web applications via automatic partitioning. *21st ACM Symp. on Operating System Principles (SOSP)*, pp. 31-44, October 2007.
66. S. Chong and K. Vikram. SIF: Enforcing confidentiality and integrity in web applications. *16th USENIX Security Symposium*, August 2007.
67. Nathaniel Nystrom, Xin Qi, and Andrew C. Myers. J&: Nested intersection for scalable software extension. *ACM Conference on Object Oriented Programming Systems Languages and Applications (OOPSLA)*, Oct. 2006.

68. Stephen Chong and Andrew C. Myers. Decentralized robustness. *19th IEEE Computer Security Foundations Workshop*, pp. 242–253, July 2006.
69. Jed Liu, Aaron Kimball, and Andrew C. Myers. Interruptible iterators. *33th ACM Symp. on Principles of Programming Languages (POPL)*, pp. 283–294, Jan. 2006.
70. Michael R. Clarkson, Andrew C. Myers, and Fred B. Schneider. Belief in information flow. *18th IEEE Computer Security Foundations Workshop*, pp. 31–45, June 2005.
71. Lantian Zheng and Andrew C. Myers. End-to-end availability policies and noninterference. *18th IEEE Computer Security Foundations Workshop*, pp. 272–286, June 2005.
72. Stephen Chong and Andrew C. Myers. Language-based information erasure. *18th IEEE Computer Security Foundations Workshop*, pp. 241–254, June 2005.
73. A. Shieh, A. C. Myers, E. G. Sirer. Trickle: A Stateless Network Stack for Improved Scalability, Resilience, and Flexibility. In *2nd USENIX Symp. on Networked Systems Design and Implementation (NSDI)*, pp. 175–188, May 2005.
74. Chavdar Botev, Hubert Chao, Theodore Chao, Raymond Doyle, Sergey Grankin, Jon Guarino, Saikat Guha, Pei-Chen Lee, Dan Perry, Christopher Re, Ilya Rifkin, Tingyan Yuan, Dora Abdullah, Kathy Carpenter, David Gries, Andrew C. Myers, and Jayavel Shanmugasundaram. Supporting workflow in a course management system. *ACM Technical Symp. on Computer Science Education (SIGCSE)*, Feb. 2005.
75. Stephen Chong and Andrew C. Myers. Security policies for downgrading. *11th ACM Conference on Computer and Communications Security*, pp. 198–209, Oct. 2004.
76. Nathaniel Nystrom, Stephen Chong, Andrew C. Myers. Scalable extensibility via nested inheritance. *ACM Conf. on Object-Oriented Programming, Systems, Languages, and Applications (OOPSLA)*, pp. 99–115, Oct. 2004.
77. Lantian Zheng and Andrew C. Myers. Dynamic security labels and noninterference. *2nd Workshop on Formal Aspects in Security and Trust, IFIP TC1 WG1.7*. Springer, Aug. 2004.
78. Andrew C. Myers, Andrei Sabelfeld, and Steve Zdancewic. Enforcing robust declassification. *17th IEEE Computer Security Foundations Workshop*, pp. 172–186, June 2004.
79. Andrei Sabelfeld and Andrew C. Myers. A model for delimited release. *2003 Int'l Symp. on Software Security*. LNCS 3233, pp. 174–191, Springer-Verlag, 2004.
80. Steve Zdancewic and Andrew C. Myers. Observational determinism for concurrent program security. *16th IEEE Computer Security Foundations Workshop*, pp. 29–43, June 2003.
81. Lantian Zheng, Stephen Chong, Andrew C. Myers, and Steve Zdancewic. Using replication and partitioning to build secure distributed systems. *IEEE Symp. on Security and Privacy*, pp. 236–250, Oakland, California, May 2003.
82. Nathaniel Nystrom, Michael R. Clarkson, and Andrew C. Myers. Polyglot: An extensible compiler framework for Java. In Görel Hedin, editor, *Compiler Construction, 12th Int'l Conf.*, No. 2622 in *Lecture Notes in Computer Science*, pp. 138–152, Warsaw, Poland, Apr. 2003. Springer-Verlag.
83. Jed Liu and Andrew C. Myers. JMatch: Abstract iterable pattern matching for Java. *5th Int'l Symp. on Practical Aspects of Declarative Languages*, New Orleans, LA, Jan. 2003.
84. Steve Zdancewic, Lantian Zheng, Nathaniel Nystrom, and Andrew C. Myers. Untrusted hosts and confidentiality: Secure program partitioning. *18th ACM Symp. on Operating System Principles (SOSP)*, pp. 1–14, Banff, Canada, Oct. 2001.
85. Steve Zdancewic and Andrew C. Myers. Robust declassification. *14th IEEE Computer Security Foundations Workshop*, pp. 15–23, Cape Breton, Nova Scotia, Canada, June 2001.
86. Steve Zdancewic and Andrew C. Myers. Secure information flow and CPS. *10th European Symp. on Programming (ESOP)*, No. 2028 in *Lecture Notes in Computer Science*, pp. 46–61, 2001.
87. Andrew C. Myers. JFlow: Practical mostly-static information flow control. *26th ACM Symp. on Principles of Programming Languages (POPL)*, pp. 228–241, San Antonio, Texas, Jan. 1999.
88. Andrew C. Myers and Barbara Liskov. Complete, safe information flow with decentralized labels. *IEEE Symp. on Security and Privacy*, pp. 186–197, Oakland, California, USA, May 1998.

89. Andrew C. Myers and Barbara Liskov. A decentralized model for information flow control. *17th ACM Symp. on Operating System Principles (SOSP)*, pp. 129–142, Saint-Malo, France, Oct. 1997.
90. Miguel Castro, Atul Adya, Barbara Liskov, and Andrew C. Myers. HAC: Hybrid adaptive caching for distributed storage systems. *17th ACM Symp. on Operating System Principles (SOSP)*, pp. 102–115, St. Malo, France, Oct. 1997.
91. Andrew C. Myers, Joseph A. Bank, and Barbara Liskov. Parameterized types for Java. *24th ACM Symp. on Principles of Programming Languages (POPL)*, pp. 132–145, Paris, France, Jan. 1997.
92. B. Liskov, A. Adya, M. Castro, M. Day, S. Ghemawat, R. Gruber, U. Maheshwari, A.C. Myers, and L. Shriru. Safe and efficient sharing of persistent objects in Thor. *ACM SIGMOD Int'l Conf. on Management of Data*, pp. 318–329, Montreal, Canada, June 1996.
93. Andrew C. Myers. Bidirectional object layout for separate compilation. *OOPSLA '95*, pp. 124–139, Oct. 1995. ACM SIGPLAN Notices 30(10).
94. Mark Day, Robert Gruber, Barbara Liskov, and Andrew C. Myers. Subtypes vs. where clauses: constraining parametric polymorphism. *OOPSLA '95*, pp. 156–168, Austin, Texas, Oct. 1995. ACM SIGPLAN Notices 30(10).
95. Andrew C. Myers. Resolving the integrity/performance conflict. *Fourth Workshop on Workstation Operating Systems*, pp. 156–159, Napa, California, Oct. 1993.

Selected technical reports and invited papers

1. Andrew C. Myers. How languages can save distributed computing. Keynote talk, *40th ACM Symp. on Principles of Programming Languages (POPL)*, pp. 315–316, January 2013.
2. Andrew C. Myers. Technical perspective: reframing security for the web. *Communications of the ACM*, 52(6), p. 82, June 2009.
3. Stephen Chong, Jed Liu, Andrew C. Myers, Xin Qi, K. Vikram, Lantian Zheng, and Xin Zheng. Building secure web applications with automatic partitioning. *Communications of the ACM*, 52(2), pp. 79–87, February 2009.
4. Andrew C. Myers. Mostly-static decentralized information flow control. Technical Report MIT/LCS/TR-783, Massachusetts Institute of Technology, Cambridge, MA, Jan. 1999. Ph.D. thesis.
5. Barbara Liskov, Dorothy Curtis, Mark Day, Sanjay Ghemawat, Robert Gruber, Paul Johnson, and Andrew C. Myers. *Theta Reference Manual*. Programming Methodology Group Memo 88, MIT Laboratory for Computer Science, Cambridge, MA, Feb. 1994.
6. Andrew C. Myers. Fast object operations in a persistent programming system. Technical Report MIT/LCS/TR-599, Laboratory for Computer Science, MIT, Cambridge, MA, Jan. 1994. Master's thesis.

Software

1. SecVerilog: Verilog + Information Flow At <https://www.cs.cornell.edu/projects/secverilog/>
2. Danfeng Zhang and Andrew C. Myers. SHErrLoc: Static Holistic Error Locator. January 2014. At <http://www.cs.cornell.edu/projects/sherrloc>.
3. Andrew C. Myers et al. The Fabric secure distributed programming system. September 2010. At <http://www.cs.cornell.edu/projects/fabric>.
4. Xin Qi and Andrew C. Myers. Jmask: masked types for sound object initialization. Compiler and run-time system. Jan. 2009. At <http://www.cs.cornell.edu/projects/jmask>.
5. Michael R. Clarkson, Stephen Chong, and Andrew C. Myers. Civitas: a secure remote voting system. May 2008. At <http://www.cs.cornell.edu/projects/civitas>.
6. Stephen Chong, Jed Liu, Andrew C. Myers, Xin Qi, K. Vikram, Lantian Zheng, and Xin Zheng. Swift: automatically partitioning secure web applications. Oct. 2007. At <http://www.cs.cornell.edu/jif/swift>.
7. Nathaniel Nystrom, Xin Qi, Andrew C. Myers. J&: Nested inheritance and intersection for Java. Oct. 2006. At <http://www.cs.cornell.edu/projects/jx>.
8. Jed Liu and Andrew C. Myers. JMatch: Java plus pattern matching. Technical Report TR2002-1878, Computer Science Department, Cornell University, Oct. 2002. <http://www.cs.cornell.edu/projects/jmatch>

9. Nathaniel Nystrom, Michael Clarkson, and Andrew C. Myers. Polyglot: An extensible compiler framework for Java. Technical Report 2002-1883, Computer Science Dept., Cornell University, 2002. At <http://www.cs.cornell.edu/projects/polyglot>.
10. Andrew C. Myers, Lantian Zheng, Steve Zdancewic, Stephen Chong, and Nathaniel Nystrom. Jif: Java information flow, July 2001. At <http://www.cs.cornell.edu/jif>.
11. Andrew C. Myers, Barbara Liskov, and Nicholas Mathewson. PolyJ: Parameterized types for Java, July 1998. At <http://www.cs.cornell.edu/polyj>.

Selected Invited Conference Talks and Tutorials

- Keynote talk, ACM Symposium on Principles of Programming Languages, January 2013.
- Invited lecture series, Oregon Programming Languages Summer School, June 2019 and July 2012.
- Keynote talk, ACM Workshop on Programming Languages and Security, June 2012.
- Constructive security using information flow control. Invited lecture, Collège de France, Paris, France, March 2011.
- Programming secure, composable distributed systems with a higher-level language abstraction. Distinguished Lecture, University of Maryland, College Park, Maryland, November 2010.
- Building Security and Privacy into Information Technology. Congressional briefing, Washington, DC, April 2010.
- Distinguished Lecture, University of Darmstadt, Darmstadt, Germany, October 2009.
- Using Security Policies to Build Secure Software. Invited lecture series, NATO Summer School Marktoberdorf 2009 on Logics and Languages for Reliability and Security. Marktoberdorf, Germany, August 2009.
- Keynote speaker, 2009 IBM PL Day. Hawthorne, New York, May 2009.
- Invited speaker, International Conference on Formal Methods for Open Object-based Distributed Systems (FMOODS'08). Oslo, Norway, June 2008.
- Invited tutorial: Expressing and Enforcing Security with Programming Languages. ACM Conference on Programming Language Design and Implementation, June 2006.
- Keynote speaker, 3rd ACM Workshop on Formal Methods in Security Engineering: From Specifications to Code (FMSE). Alexandria, VA, Nov. 2005.
- Keynote speaker, 6th ACM Workshop on Program Analysis for Software Tools and Engineering (PASTE), Lisbon, Portugal, Sept. 2005
- Keynote speaker, 14th European Symposium on Programming (ESOP), Edinburgh, Scotland, March 2005.
- Invited tutorial: Security through Languages and Compilers. International Symposium on Code Generation and Optimization, San Francisco, California, March 2003.
- Security-typed languages and distributed computation. 8th International Static Analysis Symposium, invited session on security, Paris, France, July 2001.

Other Professional Activities

Editorial Boards and Program Chairs:

- 2016– Editor-in-Chief, ACM Transactions on Programming Languages and Systems
- 2013–2016 co-Editor-in-Chief, Journal of Computer Security (On board 2006–2017)
- 2014–2017 ACM Doctoral Dissertation Award Committee (2016 chair)
- 2009–2016 ACM Transactions on Computing Systems
- 2006–2010 ACM Transactions on Information and System Security
- 2018 Program chair, ACM Symp. on Principles of Programming Languages (POPL)
- 2016 Program co-chair, ACM Conf. on Computer and Communication Security (CCS)
- 2015 Program co-chair, Int'l Conf. on Principles of Security and Trust (POST)
- 2010 Program co-chair, IEEE Symp. on Computer Security Foundations (CSF)
- 2009 Program co-chair, IEEE Symp. on Security and Privacy (“Oakland”)

Selected program committees

2018, '17, '12, '05	ACM Symp. on Principles of Programming Languages (POPL)
2016	European Symp. on Security and Privacy
2020, '16, '14, '13, '12, '04	ACM Conf. on Computer and Communications Security (CCS)
2019, '16, '10, '02	ACM Symp. on Programming Language Design and Implementation (PLDI)
2015, '10, '09, '04	IEEE Symp. on Computer Security Foundations
2015, '14	Int'l Conf. on Principles of Security and Trust (POST)
2015, '12, '11, '09, '08, '07, '04, '01	IEEE Symp. on Security and Privacy ("Oakland")
2014	Eurosys 2014
2013	Int'l Conf. on Architectural Support for Programming Languages and Operating Systems (ASPLOS)
2011, '09, '07, '01	ACM Symp. on Operating Systems Principles (SOSP)
2007	Dagstuhl Seminar on Mobility, Ubiquity, and Security
2019, '06	ACM Conf. on Object-Oriented Programming Systems, Languages, and Applications (OOPSLA)
2006	USENIX Security Symp.
2004, '00	USENIX Symp. on Operating Systems Design and Implementation (OSDI)

Studies

Chair, IARPA STONESOUP Study on Software Security Assurance, 2009
Member, DARPA Information Science and Technology Study Group (ISAT), 2005–2008
Participant, DARPA ISAT Study on Programmable Matter, Sep. 2005–Aug. 2006.
Participant, DARPA ISAT Study on Bolt-On Security, Feb.–Aug. 2004.

Ph.D. Students

Graduated

Stephan Zdancewic, Ph.D. 2002. Professor, University of Pennsylvania.
Nathaniel Nystrom, Ph.D. 2006. Assistant Professor, University of Lugano, Switzerland.
Lantian Zheng, Ph.D. 2007. Google.
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