

# J. Adam Fischbach

## Research Interests

Programming language design and implementation; computer science education

## Education

- Ph.D. Computer Science and Engineering, August 2005  
Thesis: Reasoning about Higher-Order Functions and Parameters  
Advisor: John Hannan  
The Pennsylvania State University, University Park, PA
- B.A. Computer Science, *summa cum laude*, May 1997  
With Honors in Computer Science  
Drew University, Madison, NJ

## Teaching Experience

Widener University, Chester, PA  
Associate Professor, 2013-current  
Assistant Professor, 2008-2013  
Visiting Assistant Professor, 2007-2008  
Courses Taught:

- CSCI 452 – Operating Systems II
- CSCI 451 – Operating Systems I
- CSCI 388 – Mobile App Development
- CSCI 355 – Artificial Intelligence
- CSCI 344 – Programming Languages
- CSCI 288 – Object-Oriented Programming in Java
- CSCI 258 – Data Structures and Algorithms (Java)
- CSCI 257 – Object-Oriented Programming (Java)
- CSCI 152 – Introduction to Computer Science II (C)
- CSCI 151 – Introduction to Computer Science I (C)
- CSCI 131 – Introduction to Programming (Python)
- CSCI 101 – Introduction to PCs
- MIN 101 – Introduction to Informatics

Colby College, Waterville, ME  
Visiting Assistant Professor, 2006-2007  
Courses Taught:

- CS 357 – Operating Systems
- CS 333 – Programming Languages
- CS 151 – Structured Programming and Elementary Algorithms (Java)

The Pennsylvania State University, University Park, PA  
Research Assistant, 1999-2001 & Fall 2002  
Teaching Assistant, 1997-1998  
Instructor, 1998-2003  
Courses Taught:

- CMPSC 203 – Programming with Business Applications (Pascal)
- CMPSC 101 – Introduction to Algorithmic Processes (C++)

## Peer-Reviewed Conference/Journal Publications

### At Widener:

- Yana Kortsarts and Adam Fischbach. Incorporating Professional Ethics into an Introductory Computer Science Course. *Journal of Computing Sciences in Colleges*, vol. 29(3), 2014.
- Adam Fischbach. Visualization of Student-Implemented OS Algorithms in Java. *Journal of Computing Sciences in Colleges*, vol. 28(3), 2013.

*Paper published twice:*

- Kortsarts, Y, A Fischbach, J Rufinus, J M Utell, and S C Yoon. Developing Oral and Written Communication Skills in Undergraduate Computer Science and Information Systems Curriculum. *Information Systems Education Journal*, vol. 8(30), 2010.
- In *The Proceedings of the Information Systems Education Conference*, vol. 26, Washington DC, 2009.

### At Penn State:

- Adam Fischbach and John Hannan. Specification and Correctness of Lambda Lifting. *Journal of Functional Programming*, pages 509-543, vol. 13(3), 2003.
- Adam Fischbach and John Hannan. Type Systems for Useless-Variable Elimination. In Olivier Danvy and Andrzej Filinski, editors, *Second Symposium on Programs as Data Objects*. Lecture Notes in Computer Science, no. 2053, pages 25-38, Aarhus, Denmark, May 2001. Springer-Verlag.

- Adam Fischbach and John Hannan. Specification and Correctness of Lambda Lifting. In Walid Taha, editor, *Workshop on Semantics, Applications, and Implementation of Program Generation*. Lecture Notes in Computer Science, no. 1924, pages 108-128, Montreal, Canada, September 2000. Springer-Verlag.

## Peer-Reviewed Conference Presentations

- Kortsarts, Yana, Adam Fischbach. Integrating Computer Ethics Components into the Computer Science Curriculum. Poster presentation at CCSC Northeast, April, 2012.
- Fischbach, Adam. Java Visualization of Student-Implemented OS Algorithms. Demo presentation at CCSC Northeast, April, 2011. Abstract in *Journal of Computing Sciences in Colleges*, vol. 26(6), 2011.
- Kortsarts, Yana, Timothy Dansdill, Adam Fischbach, Mark Hoffman and Janine Utell. Writing Intensive and Writing Extensive: A Continuum for Advanced Writing in Computer Science Education. Panel presentation at CCSC Northeast, April, 2010. Abstract in *The Journal of Computing Sciences in Colleges*, vol. 25(6), 2010.

## Student Presentations

- Chris Addis and Michael Burgio. *Analysis of Freshman C Programs*. Senior Project. Widener Student Project Day 2012. Advisor: Adam Fischbach.
- Joe Gamble. *Checkers and Artificial Intelligence*. Senior Project. Widener Student Project Day 2011. Advisor: Adam Fischbach.
- Kimberly Chiffens and Maria Janelli. *Cryptology and the Vigenere Cipher*. Senior Project. Poster presented at CCSC Northeast, April, 2011. Advisors: Yana Kortsarts and Adam Fischbach.
- Joseph Fijalkowski. *Bioinformatics*. Senior Project. Poster presented at CCSC Northeast, April, 2011. Advisors: Yana Kortsarts and Adam Fischbach.
- Meghan Sands and Mark Nanni. *Web-based Data Encoding Visualization Tool: an Application Using Java Swing*. Senior Project. Widener Student Project Day 2009. Advisors: Jeff Rufinus and Adam Fischbach.
- Ben Ferenchak. *Exploring Steganography with Java*. Honor's Week 2009. Poster presented at CCSC East, October, 2008.

Advisors: Yana Kortsarts and Adam Fischbach.

- Trevor Sheehan. *Exploring AI Through Game Programming*. Honor's Week 2009. Poster presented at CCSC East, October, 2008.

Advisors: Yana Kortsarts and Adam Fischbach.

## **Academic Service (at Widener)**

### **University Level:**

- Implementation Committee on Assessment of Student Learning (2012-2015)
- Faculty Council Technology & Instructional Resources Committee (2012-2014)
- Intellectual Property Taskforce (2012-2014)
- Informatics Program Committee (2009-2011)

### **College Level:**

- Digital Media Informatics Committee (2012-current)
  - Chair (2013-2014)
- Technology & Instructional Resources Committee (2015)
- Academic Assessment and General Education Committee (2011-2014)
- Dean Search Committee (2013-2014)
- A&S Secretary (2009-2011)
- Executive Committee (as A&S Secretary)
- Curriculum & Planning Committee (as A&S Secretary)

### **Division Level (Science):**

- Science Assessment of General Education (2014-current)
- Science Strategic Planning Committee (2015)
- Curriculum & Planning Committee (2008-2010, 2013-2014)

### **Department Level (Computer Science):**

- Chair (2014-current)
- ABET Coordinator (2008-current)
- Acting Chair (2010-2011)

## **Honors**

- Received Graduate Student Teaching Award from the Computer Science and Engineering Department at Penn State in 1999
- Member of Phi Beta Kappa