

Cynthia B. Taylor

- CONTACT INFORMATION Department of Computer Science
Oberlin College
229 King *Email:* ctaylor@oberlin.edu
10 N Professor, Oberlin OH 44074 <https://www.cs.oberlin.edu/~ctaylor/>
- PROFESSIONAL EXPERIENCE Assistant Professor, Oberlin College, July 2012 - July 2015, July 2018 - Present
Courses: Computers and the Physical World (345), Networks (342), Operating Systems (341), Human-Computer Interaction (313), Computer Organization (210), Introduction to Computer Science (150)
- Clinical Assistant Professor, University of Illinois at Chicago, August 2015 - June 2018
Courses: Operating Systems (385), Computer Systems (361), Computer Design (362), Machine Organization (261), Program Design I (111)
- Instructor, University of California San Diego, Operating Systems, Summer 2011
- EDUCATION **University of California, San Diego**, La Jolla, California
- Ph.D., Computer Science and Engineering, June 2012
- Advisor: Professor Joe Pasquale
 - Area of Study: Systems and Networks
- M.S., Computer Science and Engineering, August 2008
- Advisor: Professor Joe Pasquale
- Oberlin College**, Oberlin, Ohio
- B.A., Computer Science, Creative Writing, May 2002
- PUBLICATIONS C. Taylor, M. Clancy, K. Webb, D. Zingaro, C. Lee, L. Porter, The Practical Details of Building a CS Concept Inventory, *The 51st ACM Technical Symposium on Computer Science Education (SIGCSE 20)*, Portland, OR, March 2020
- H. Bort, D. Bunde, Z. Butler, C. Hovey, J. Spacco, C. Taylor, *Conversation with a Prominent Propagator: Leo Porter*, Inroads Magazine, February 2020
- M. Liu, J. Hsieh, N. Hahn, A. Zhou, E. Deng, S. Burley, C. Taylor, A. Kittur, B. Myers, Unakite: Scaffolding Developers' Decision-Making Using the Web *The ACM Symposium on User Interface Software and Technology (UIST 2019)* New Orleans, LA, October 2019
- L. Porter, D. Zingaro, S. Liao, C. Taylor, K. Webb, C. Lee, M. Clancy, BDSI: A Validated Concept Inventory for Basic Data Structures *The International Computing Education Research Conference (ICER)* Toronto, Ontario, Canada, August 2019
- C. Taylor and S. Sakharkar. ');DROP TABLE textbooks;--: An Argument for SQL Injection Coverage in Database Textbooks. *The 50th ACM Technical Symposium on Computer Science Education (SIGCSE 19)*, Minneapolis, MN, February 2019
- C. Taylor, J. Spacco, D. Bunde, Z. Butler, H. Bort, C. Hovey, F. Maiorana, and T. Zeume. Propagating the Adoption of CS Educational Innovations. *Companion of the 23rd Annual ACM Conference on Innovation and Technology in Computer Science Education (ITiCSE 18 Companion)*, Larnaca, Cyprus, July 2018

- D. Zingaro, C. Taylor, L. Porter, M. Clancy, C. Lee, S. Liao, K. Webb, Identifying Student Difficulties with Basic Data Structures, *The 2018 International Computer Education Research Conference (ICER)*, Espoo Finland, August 2018
- C. Taylor, J. Spacco, D. Bunde, A. Petersen, S. Liao, L. Porter, A Multi-institution Exploration of Peer Instruction in Practice, *The 23rd Annual ACM Conference on Innovation and Technology in Computer Science Education (ITiCSE '18)*, Larnaca Cyprus, July 2018
- T. Berger-Wolf, B. Igit, C. Taylor, R. Sloan and R. Poretsky, A Biology-themed Introductory CS Course at a Large, Diverse Public University, *The ACM Technical Symposium on Computer Science Education (SIGCSE)*, Baltimore MD, March 2018
- L. Porter, D. Zingaro, C. Lee, C. Taylor, K. Webb, M. Clancy, Developing Course-Level Learning Goals for Basic Data Structures in CS2, *The ACM Technical Symposium on Computer Science Education (SIGCSE)*, Baltimore MD, March 2018
- P. Snyder, C. Taylor, C. Kanich, Most Websites Don't Need to Vibrate: A Cost-Benefit Approach to Improving Browser Security, *The ACM Conference on Computer and Communications Security (CCS)*, Dallas, TX, October 2017
- R. Sloan, C. Taylor, R. Warner, Initial Experiences with a CS + Law Introduction to Computer Science (CS1), *22nd Annual Conference on Innovation and Technology in Computer Science Education (ITiCSE)*, Bologna, Italy, July 2017
- P. Snyder, L. Watiker, C. Taylor, C. Kanich, CDF: Predictably Secure Web Documents, *Workshop on Technology and Consumer Protection (ConPro 17)*, San Jose, CA, May 2017
- P. Snyder, L. Ansari, C. Taylor, C. Kanich, Browser Feature Usage on the Modern Web, *Internet Measurement Conference*, Santa Monica, CA, November 2016
- E. Rose, C. Taylor, Using a Student Consultant in a Computer Science Course: An Experience Report, *21st Annual Conference on Innovation and Technology in Computer Science Education (ITiCSE)*, Arequipa, Peru, July 2016
- C. Taylor, The Web is Broken: How DNS breaks almost every design principle of the internet, *Recompiler Magazine*, Issue 1, p. 35, September 2015
- C. Taylor, J. Pasquale, The Proximal Workspace Architecture for Wearable I/O-Device Cloud Applications, *Proceedings of the Workshop on Cloud and Server Support for Wearable Computing*, London, Great Britain, December 2014
- C. Taylor, D. Zingaro, L. Porter, K. Webb, C. Lee, M. Clancy, Computer Science Concept Inventories: Past and Future, *Computer Science Education*, Volume 24, Issue 4, 2014
- L. Porter, C. Taylor, K. Webb, Leveraging Open Source Principles for Flexible Concept Inventory Development, *19th Annual Conference on Innovation and Technology in Computer Science Education (ITiCSE)*, Uppsala, Sweden, June 2014
- K. Webb, C. Taylor, Developing a Pre- and Post-Course Concept Inventory to Gauge Operating Systems Learning, *Proceedings of the ACM Technical Symposium on Computer Science Education (SIGCSE)*, Atlanta, GA, March 2014
- L. Porter, S. Garcia, J. Glick, A. Matusiewicz, C. Taylor, Peer Instruction in Computer Science at Small Liberal Arts Colleges, *18th Annual Conference on Innovation and Technology in Computer Science Education (ITiCSE)*, Canterbury, UK, July 2013

- C. Taylor, J. Pasquale, A Highly-Extensible Architecture for Networked I/O, *International Conference on Computing, Networking and Communications*, San Diego, CA, January 2013
- C. Taylor, J. Pasquale, Performance Aspects of Data Transfer in a New Networked I/O Architecture, *The 11th IEEE International Symposium on Network Computing and Applications*, Cambridge, MA, August 2012
- C. Taylor, J. Pasquale, A Remote I/O Solution for the Cloud, *5th International Conference on Cloud Computing*, Honolulu, HA, June 2012
- C. Taylor, J. Pasquale, Improving Video Performance in VNC Under Latency Conditions, *2010 International Symposium on Collaborative Technologies and Systems*, Chicago, IL, May 2010.
- C. Taylor, The Proximal Workspace Architecture: A Latency-focused Approach to Supporting Context-Aware Applications, *Doctoral Dissertation Consortium, 2010 International Symposium on Collaborative Technologies and Systems*, Chicago, IL, May 2010
- C. Taylor, J. Pasquale, Towards a Proximal Resource-based Architecture to Support Augmented Reality Applications, *Workshop on Cloud-Mobile Convergence for Virtual Reality*, Waltham, MA, March 2010
- J.R. Movellan, F. Tanaka, I. Fasel, C. Taylor, P. Ruvolo, and M. Eckhardt, The RUBI project: a progress report, *Proc. ACM/IEEE international conference on Human-robot Interaction*, Arlington, VA, pp. 333-339, March 2007

AWARDS

Honorable Mention for Best Paper Award

- Received Honorable Mention for Best Paper at UIST 2019 for the paper *Unakite: Scaffolding Developers' Decision-Making Using the Web*.

Best Paper Award

- Selected as #1 Best Paper for the Curriculum Innovation track of SIGCSE 2019 for the paper *);DROP TABLE textbooks;--: An Argument for SQL Injection Coverage in Database Textbooks*.

College of Engineering Teaching Award

- Recognized for outstanding teaching contributions to the University of Illinois at Chicago, 2017

UIC Teaching Scholar

- Selected for the University of Illinois Chicago Teaching Scholar program, Spring 2016

Professor Props

- Recognized for “Outstanding service to the Oberlin First-Year Student Community”, 2014

Summer Graduate Teaching Fellow

- Selected as a UCSD Graduate Teaching Fellow, Summer 2011

Outstanding Paper Award

- Won Best Paper Award for *Improving Video Performance in VNC Under Latency Conditions*, 2010 International Symposium on Collaborative Technologies and Systems, May 17, 2010.

National Science Foundation IGERT Fellowship

- IGERT Fellowship in Learning and Vision in Humans and Machines, 2005-2007

INVITED TALKS,
WORKSHOPS AND
PANELS

Workshop on Teaching Introductory Programming
Workshop, Ohio State University, August 2019

Peer Instruction in Practice

Workshop, The Consortium for Computing Sciences in Colleges, Calvin College,
September 2017

Not Every Website Needs to Vibrate: An Exploration of JavaScript on the Web

Invited talk as Honors Examiner, Oberlin College, May 2017

Peer Instruction in Practice

Workshop, The ACM Technical Symposium on Computer Science Education (SIGCSE),
Seattle WA, March 2017

Peer Instruction and Active Learning

Workshop, University of Maryland College Park, June 2016

Diverse Paths to Research and Teaching at Liberal Arts Colleges

Panel, The Grace Hopper Celebration of Women in Computer Science, Houston,
TX, October 2015

The CS Concept Inventory Quiz Show

Panel, The ACM Technical Symposium on Computer Science Education (SIGCSE),
Kansas City, MI, March 2015

Women in STEM Faculty

Panel, Oberlin College, February 2014

A New Systems Architecture for Remote I/O Devices

Refereed Talk, Ohio Celebration of Women in Computing, February 2013

Improving Thin Client Performance with the Smart Proxy Architecture

Invited Talk, Portland State University, November 2008

SERVICE

Reviewing

- ACM International Computing Education Research (ICER) (2019-2020)
- ACM Technical Symposium on Computer Science Education (SIGCSE) (2013 - 2020)
- ACM Conference on Innovation and Technology in Computer Science Education (ITiCSE) (2019 - 2020)
- Computer Science Education (2018, 2019)
- Transactions on Computing Education (TOCE) (2012, 2017)
- ACM Inroads (2017)
- ACM Conference on the World Wide Web (2016)
- Midstates Conference For Undergraduate Research in Computer Science and Mathematics (MCURCSM) (2012, 2013)

Published Peer Instruction Materials

- Materials for seven courses made public via <http://www.peerinstruction4cs.org>