Phillip B. Kirlin

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Education

- Ph.D., Computer Science, University of Massachusetts Amherst (2014)
  Dissertation title: *A Probabilistic Model of Hierarchical Music Analysis.*
  Advisor: David Jensen.

- M.S., Computer Science, University of Massachusetts Amherst (2007)
  Advisor: Paul Utgoff

- B.S., Computer Science, *summa cum laude*, University of Maryland, College Park (2004)

Professional Appointments

- Assistant Professor (2012–present), Department of Mathematics and Computer Science, Rhodes College, Memphis, Tennessee.

- Visiting Research Scholar (January–May 2015), College of Fine Arts, Boston University, Boston, Massachusetts.

Peer-Reviewed Publications

- Journal Articles

  1. **Phillip B. Kirlin** and Jason Yust. Analysis of analysis: Using machine learning to evaluate the importance of music parameters for Schenkerian analysis. *Journal of Mathematics and Music*, 10(2):127–148, 2016.

- Refereed Conference Papers

  9. **Phillip B. Kirlin**. Global properties of expert and algorithmic hierarchical music analyses. In *Proceedings of the 17th International Society for Music Information Retrieval Conference*, pages 640–646, 2016.

  8. **Phillip B. Kirlin** and David L. Thomas. Extending a model of monophonic hierarchical music analysis to homophony. In *Proceedings of the 16th International Society for Music Information Retrieval Conference*, pages 715–721, 2015.

  7. **Phillip B. Kirlin** and David D. Jensen. Using supervised learning to uncover deep musical structure. In *Proceedings of the 29th AAAI Conference on Artificial Intelligence*, pages 1770–1776, 2015.

  6. **Phillip B. Kirlin**. A data set for computational studies of Schenkerian analysis. In *Proceedings of the 15th International Society for Music Information Retrieval Conference*, pages 213–218, 2014.

5. **Phillip B. Kirlin** and David D. Jensen. Probabilistic modeling of hierarchical music analysis. In *Proceedings of the 12th International Society for Music Information Retrieval Conference*, pages 393–398, 2011.

4. **Phillip B. Kirlin**. Using harmonic and melodic analyses to automate the initial stages of Schenkerian analysis. In *Proceedings of the 10th International Society for Music Information Retrieval Conference*, pages 423–428, 2009.

3. **Phillip B. Kirlin** and Paul E. Utgoff. A framework for automated Schenkerian analysis. In *Proceedings of the Ninth International Conference on Music Information Retrieval*, pages 363–368, 2008.

2. Paul E. Utgoff and **Phillip B. Kirlin**. Detecting motives and recurring patterns in polyphonic music. In *Proceedings of the 2006 International Computer Music Conference*, pages 487–494, 2006.

1. **Phillip B. Kirlin** and Paul E. Utgoff. VoiSe: Learning to segregate voices in explicit and implicit polyphony. In *Proceedings of the Sixth International Conference on Music Information Retrieval*, pages 552–557, 2005.

- Refereed Conference Posters

  1. **Phillip B. Kirlin**. Automated layout of Schenker graphs by computer. Second International Conference on Mathematics and Computation in Music, 2009.

Honors and Awards

- Early Leave Sabbatical, Rhodes College, Spring 2015.

- Nominee, Distinguished Teaching Award, University of Massachusetts Amherst, 2009–2010 AY.

- Outstanding Teaching Assistant Award, Department of Computer Science, University of Massachusetts Amherst, 2008–2009 AY.

- Honorable Mention, Graduate Research Fellowship Program, National Science Foundation, 2004.

Grants

- Rhodes College Faculty Development Endowment Grant, "Investigating the Effect of Harmony on Hierarchical Music Analysis," Summer 2015.

- Rhodes College Hill Grant, "Standardizing and Improving the Core Introductory Sequence in Computer Science," Summer 2015.

- Spence Wilson Travel Grant, Fall 2014.

Invited Talks

- "Probabilistic Modeling of Schenkerian Analysis." Music Theory Speakers' Series, University of Massachusetts Amherst, March 27, 2015.

- "Algorithms and Probabilistic Modeling of Hierarchical Music Analysis." Massachusetts Institute of Technology, April 26, 2012.

Teaching Experience

- Rhodes College:
  Computer Science 141: Programming Fundamentals (F15 [56 students], F13 [50], S13 [29], F12 [27]).
  Computer Science 142: Object-Oriented Programming (S17 [55], S14 [29]).
  Computer Science 172: Discrete Structures (F16 [27], S16 [11], F14 [28], F13 [11], S13 [14]).
  Computer Science 340: Databases (F16 [26], S14 [22]).
  Computer Science 360: Programming Languages (F15 [20], S13 [16]).
  Computer Science 372: Artificial Intelligence (S17 [27], F14 [14], F12 [9])
  Computer Science 485/486: Senior Seminar (S16 [22], F15 [22], S14 [6]).

- Center for Talented Youth Summer Intensive Studies Program:
  Fundamentals of Computer Science (Summers 2011, 2010, 2009)

- University of Massachusetts Amherst (instructor of record):
  Computer Science 120: Introduction to Problem Solving with the Internet (F07, S07, F06, Sum05).

Service to Profession

- Program Committee Member

  - AAAI Conference on Artificial Intelligence, 2017.
  - International Conference on Mathematics and Computation in Music, 2015.

- Reviewer for the journals *Music Perception* and *Knowledge-Based Systems*.

- Judge for undergraduate research projects, ACM Special Interest Group on Computer Science Education (SIGCSE) Technical Symposium, 2012.

Service to Rhodes College

- Committees

  - Foundations Curriculum Committee, Spring 2016–present
  - Campus Climate Working Group, Spring 2016
  - Undergraduate Research and Creative Activity Symposium Organizing Committee, 2015–2016 AY.
  - Physics Visiting Faculty Search Committee, 2014–2016 AYs

- Undergraduate Research Mentoring

  - Zaid Baba (2016–2017), music informatics research student
  - Hong Xu (2016–2017), music informatics research student
  - Joel Michelson (2016–2017), music informatics research student
  - Sumner Magruder (2015–2016), mathematics senior seminar advisor
  - David Thomas (2014–2015), music informatics research student

- Computer Science Club Faculty Advisor, 2014–2017 AYs