Curriculum Vitae

Alan C. Jamieson
Department of Mathematics and Computer Science
St. Mary's College of Maryland
St. Mary's City, MD 20686
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Research Interests

Domination Algorithms, Graph Theory, Self-Stabilizing Algorithms, Game Development and Design, Robotics, Recruitment and Retention of Underrepresented Groups in Computer Science

Education

Ph. D. Computer Science, 2007
Clemson University, Clemson, SC
Dissertation: Linear-Time Algorithms for Edge-Based Problems

B.S. Computer Science, 2003
Tulane University, New Orleans, LA

Publications

1. A. C. Jamieson, L. H. Jamieson, A. C. Johnson, *Application of Non-programming Focused Treisman-style Workshops in Introductory Computer Science.* Proceedings of the 43rd SIGCSE Technical Symposium on Computer Science Education (Raleigh, NC, 2012). *SIGCSE '12* (2012), 271-276.

2. L. H. Jamieson, A. C. Jamieson, *Algorithms for Secondary Domination*. Proceedings of the Fortieth Southeastern International Conference on Combinatorics, Graph Theory and Computing (Boca Raton, FL, 2009). *Congressus Numerantium* 198 (2009), 119-126.

3. A. C. Jamieson, *Some Graph Classes and the Wimer Edge Variant.* Proceedings of the Thirty-ninth Southeastern International Conference on Combinatorics, Graph Theory and Computing (Boca Raton, FL, 2008). *Congressus Numerantium* (2008), 51-63.

4. A. C. Jamieson, W. Goddard, S. T. Hedetniemi, *A Variant of the Wimer Method for Designing Edge-Based Algorithms*. *AKCE International Journal of Graphs and Combinatorics* 5, no. 2 (Nov. 2008), 117-125.

5. A. C. Jamieson, *Linear Algorithms for Edge-Vertex Domination in Trees.* Proceedings of the Thirty-eighth Southeastern International Conference on Combinatorics, Graph

Theory and Computing (Boca Raton, FL, 2007). *Congressus Numerantium.* 187 (2007), 214-222.

6. A. C. Jamieson, N. A. Kraft, J. O. Hallstrom and B. A. Malloy, *A Metric Evaluation of Game Application Software,* Proceedings of Future Play 2005: The International Academic Conference on the Future of Game Design and Technology, East Lansing, Michigan, USA, October 13-15, 2005.

Presentations

1. A. C. Jamieson, L. H. Jamieson, *The Impact of Locality on Wimer Style Algorithms,* Forty-Fourth Southeastern International Conference on Combinatorics, Graph Theory and Computing. Boca Raton, Florida, USA, March 4-8, 2013.

2. M. Wisser*, A. C. Jamieson, *Non-Trivial Self-Stabilizing Algorithm for Minimal Perfect Domination in an Arbitrary Graph,* Forty-Fourth Southeastern International Conference on Combinatorics, Graph Theory and Computing. Boca Raton, Florida, USA, March 4-8, 2013.

3. A. C. Jamieson, *Robotics and Self-Stabilizing Algorithms,* Forty-Third Southeastern International Conference on Combinatorics, Graph Theory and Computing. Boca Raton, Florida, USA, March 5-9, 2012.

4. A. C. Jamieson, L. H. Jamieson, *Some Observations on the Tree Chromatic Number of a Graph*, Forty-Third Southeastern International Conference on Combinatorics, Graph Theory and Computing. Boca Raton, Florida, USA, March 5-9, 2012.

5. A. Green*, A. C. Jamieson, *An Investigation of Perfect Domination on Trees using the Wimer Method,* Forty-Third Southeastern International Conference on Combinatorics, Graph Theory and Computing. Boca Raton, Florida, USA, March 5-9, 2012.

6. J. E. Stewart*, A. C. Jamieson, *Algorithm for Minimal Paired Dominating Sets on Trees,* Forty-Third Southeastern International Conference on Combinatorics, Graph Theory and Computing. Boca Raton, Florida, USA, March 5-9, 2012.

7. A. C. Jamieson, L. H. Jamieson, A. C. Johnson, *Application of Non-programming Focused Treisman-style Workshops in Introductory Computer Science,* SIGCSE '12. Raleigh, North Carolina, USA, February 29-March 3, 2012.

8. C. Douglas, A. C. Jamieson, *Measuring the Power of Jerks,* Forty-Second Southeastern International Conference on Combinatorics, Graph Theory and Computing. Boca Raton, Florida, USA, March 7-11, 2011.

9. C. S. K. John*, A. C. Jamieson, *Algorithm for Total Nearly Perfect Sets on Trees,* Forty-Second Southeastern International Conference on Combinatorics, Graph Theory and Computing. Boca Raton, Florida, USA, March 7-11, 2011

10. K. Seeger*, A. C. Jamieson, *An Algorithm for Nearly Perfect Edge Sets on Trees,* Forty-Second Southeastern International Conference on Combinatorics, Graph Theory and Computing. Boca Raton, Florida, USA, March 7-11, 2011

11. A. C. Jamieson, *Self-Stabilizing Algorithm for Roman Domination.* Forty-First Southeastern International Conference on Combinatorics, Graph Theory and Computing. Boca Raton, Florida, USA, March 8-12, 2010.

12. I. S. Becker*, A. C. Jamieson, *Self-Stabilizing Paired Domination of Graphs.* Forty-First Southeastern International Conference on Combinatorics, Graph Theory and Computing. Boca Raton, Florida, USA, March 8-12, 2010.

13. A. C. Jamieson, *Introduction to the Microsoft Robotics Developer Studio 2008*. Twin Cities Code Camp 7, University of Minnesota, Minneapolis, MN, USA, October 24, 2009.

14. A. C. Jamieson, *A Variety of Algorithms for Matching on Trees.* Fortieth Southeastern International Conference on Combinatorics, Graph Theory, and Computing. Boca Raton, Florida, USA, March 2-6, 2009.

15. L. H. Jamieson, A. C. Jamieson, *Algorithms for Secondary* Domination*,* Fortieth Southeastern International Conference on Combinatorics, Graph Theory, and Computing. Boca Raton, Florida, USA, March 2-6, 2009.

16. A. C. Jamieson, *Some Graph Classes and the Wimer Edge Variant.* Thirty-Ninth Southeastern International Conference on Combinatorics, Graph Theory, and Computing. Boca Raton, Florida, USA, March 3-7, 2008.

17. A. Jamieson, *An Edge-based Variant of the Wimer Method for Computing the EV-domination Numbers of Trees.* Thirty-Eighth Southeastern International Conference on Combinatorics, Graph Theory, and Computing. Boca Raton, Florida, USA, March 5-9, 2007.

** undergraduate researcher*

Workshops

1. A. C. Jamieson and L. H. Jamieson, *Setting up and Running Emerging Scholars Workshops for Introductory Computer Science.* Grace Hopper Celebration of Women in Computing. Minneapolis, Minnesota, USA, October 2-5, 2013.

Invited Talks

1. *Robots Amok: A Look at (Dangerous?) College Robotics Research,* Math Girls' Day Keynote, October 2013.

2. *Robots Amok: A Look At (Dangerous?) College Robotics Research.* SMCM Alumni College, June 2011.

3. *Robots Amok: A Look At (Dangerous?) College Robotics Research.* SMCM Faculty Seminar Series, November 2009.

4. *How to Produce Original Algorithmic Results in 30 Minutes or Less, Guaranteed.* Math Research Seminar, SMCM, October 2008.

Grants and Contracts

1. *Emerging Scholars Research Experience for Undergraduates,* Sponsored by NSF (NSF Grant DMS-1005046; w/ D. Kung (PI), S. Ganzell, S. Goldstine, A. Meadows). October, 2010 to August, 2013. Senior Researcher. Award: $266376.

2. *The Mathematics of LEGOs,* Sponsored by MAA (NREUP; w/ D. Kung, C. Douglas). Summer 2010. Award: $26630.

Awards

1. National Center for Women and Information Technology and AT&T Undergraduate Research Mentoring Award, 2014.

Professional Service

1. Reviewer, National Center for Women in Information Technology Aspirations Program, 2013.

2. Reviewer, Australasian Journal of Combinatorics, 2010.

3. Session Chair, Forty-First Southeastern International Conference on Combinatorics, Graph Theory and Computing, Boca Raton, Florida, USA, March 8-12, 2010.

4. Session Chair, Thirty-Ninth Southeastern International Conference on Combinatorics, Graph Theory and Computing, Boca Raton, Florida, USA, March 3-7, 2008.

Teaching Experience and Positions

Associate Professor – 2014-present
Assistant Professor - 2009-2014
Visiting Assistant Professor 2007-2009
Computer Science Program Coordinator – 2011-2014
St. Mary's College of Maryland, St. Mary's City, MD
Courses Taught:

- COSC 120 - Introduction to Computer Science I

- COSC 201 - Algorithms and Data Structures
- COSC 251 - Programming Languages
- COSC 302 - Software Engineering II
- COSC 335 - Operating Systems
- COSC 338 - Computer Graphics
- COSC 370 - Artificial Intelligence
- COSC 440 - Theory of Computation
- COSC 445 – Design and Analysis of Algorithms
- COSC 438/480 - Topics in Computer Science: Game Design and Development
- COSC 480 - Topics in Computer Science: Compiler Design and Development
- COSC 480 - Topics in Computer Science: Robotics
- COSC 480 – Topics in Computer Science: Operations Research
- COSC 480 – Topics in Computer Science: Small-Scale Computing

Graduate Teaching Assistant - 2003 - 2007
Clemson University, Clemson, SC
- Lecturer CPSC 111 - Elementary Computer Programing in C/C++
- Lab Instructor CPSC 161 - Visual Basic
- Lab Instructor CPSC 102 - Second Year Programming (JAVA)
- Lab Instructor CPSC 101 - Introduction to Programming (JAVA)

Teaching Assistant - 2002 - 2003
Tulane University, New Orleans, LA
- Lab Instructor CPSC 101
- Lab Instructor CPSC 102

Professional Experience

Systems Administrator - 2004 - 2006
Clemson University, Clemson, SC

Professional Associations

Association for Computing Machinery
ACM SIGACT - Algorithms and Computation Theory
ACM SIGCSE - Computer Science Education
International Game Developers Association
National Center for Women and Information Technology