Mark Boady

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School Address
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EDUCATION

Doctor of Philosophy, Computer Science
Drexel University, Phila., PA — June 2016
THESIS - Applications of Symbolic Computation to the Calculus of Moving Surfaces
Advisors - Dr. J. Johnson and Dr. P. Grinfeld

Master of Science, Computer Science
Drexel University, Phila., PA — March 2012

Bachelor of Science, Computer Science
Drexel University, Phila., PA — June 2006

EMPLOYMENT HISTORY

Drexel University — Sept 2024 - Current
Associate Teaching Professor, Philadelphia, PA
- Taught and designed content for freshman CS sequence
- Redesigned and run Concurrent Programming elective
- Taught and designed Postbaccalaureate Data Structures
- Managed Course Assistants
- Chaired Committees on freshman course material
- Worked on teaching hiring committees

Drexel University — Sept 2015 – August 2023
Assistant Teaching Professor, Philadelphia, PA
- Taught advanced algorithms and theory classes
- Taught introductory programming and algorithms courses
- Managed teams of teaching assistants
- Redesigned existing classes to bring material up to date

Drexel University — Sept 2009 – August 2015
Graduate Teaching Assistantship, Philadelphia, PA
- Assisted in design of course material
- Graded and managed grading teams
- Guest Lecture for multiple courses

Capybara Solutions, LLC — June 2006 – Sept 2010
Owner/Operator, King of Prussia, PA
- Designed and developed web based business management software for multi-million dollar companies

- Custom software and database design
- Managed business integration and user training
- Provided support and updates to systems

Tozour Trane Sept 2002 - March 2005
IT Specialist (Internship), King of Prussia, PA

Teaching Experience

- *CS 164* Foundations of Computer Science
  Fall 2015
- *CS 171* Computer Programming I
  Fall 2016, Winter 2017, Fall 2017, Winter 2018, Fall 2018, Winter 2019, Winter 2020, Winter 2021, Winter 2022, Winter 2023, Winter 2024
- *CS 172* Computer Programming II
  Winter 2016, Spring 2016, Spring 2023, Spring 2024
- *CS 260* Data Structures
  Summer 2016, Summer 2017, Summer 2018, Spring 2019, Summer 2019, Summer 2020, Summer 2021, Spring 2022, Spring 2023, Winter 2024
- *CS 265* Advanced Programming Techniques
  Summer 2018
- *CS 270* Mathematical Foundations of Computer Science
  Fall 2015, Spring 2016, Fall 2016, Spring 2017, Fall 2017, Summer 2018, Fall 2018, Spring 2019, Summer 2019, Fall 2019, Spring 2020, Fall 2020, Spring 2021, Fall 2021, Spring 2022, Fall 2022, Spring 2023, Fall 2023, Spring 2024
- *CS 300* Applied Symbolic Computation
  Fall 2015
- *CS 361* Concurrent Programming
  Fall 2021, Spring 2022, Fall 2022, Spring 2023, Fall 2023, Spring 2024
- *CS 457* Data Structures and Algorithms I
  Fall 2015
- *CS 458* Data Structures and Algorithms II
  Winter 2016
- *CS 502* Data Structures and Algorithms
  Winter 2021, Summer 2021, Winter 2022, Summer 2022, Winter 2023, Summer 2023, Winter 2024, Summer 2024
- *CS 520* CS Foundations
  Fall 2016, Fall 2017, Fall 2017, Spring 2018, Spring 2019, Fall 2019, Spring 2020, Fall 2020
- *CS 571* Advanced Programming Techniques
  Summer 2020
- *Independent Studies*
  Summer 2019 - Introduction to Quantum Algorithms
  Winter 2021 - Applications of SAT Solvers
  Spring 2021 - Post Quantum Cryptography
  Spring 2022 - Programming Quantum Algorithms

PUBLICATIONS

- M. W. Boady. Applications of Symbolic Computation to the Calculus of Moving Surfaces. Doctoral Dissertation. Drexel University, 2016.
- M. Boady, P. Grinfeld, and J. Johnson. A term rewriting system for the calculus of moving surfaces. In M. B. Monagan, G. Cooperman, and M. Giesbrecht, editors, ISSAC, pages 69–76. ACM, 2013.
- M. Boady, P. Grinfeld, and J. Johnson. A symbolic computation system for the calculus of moving surfaces. ACM Commun. Comput. Algebra, 45(1/2):109—110, July 2011.
- M. Boady, P. Grinfeld, and J. Johnson. Boundary variation of poisson's equation: a model problem for symbolic calculus of moving surfaces. Int. J. Math. Comp. Sci., 6(2), 2011.

MEMBERSHIPS

Faculty Adviser for the Drexel Gaming Association
Faculty Advisor for Hack4Impact Drexel

HONORS

Computer Science Department Outstanding Graduate TA Award
Golden Key International Honour Society
Upsilon Pi Epsilon International Honor Society
National Society of Collegiate Scholars

Talks

- Introduction to Quantum Algorithms for the Women in Computer Science Society - May 2021
- Quantum Programming Workshop for the Woment in Computer Science Society - July and August 2021