

Michael J. Bradley, Professor
Department of Computer and Data Sciences
Merrimack College
bradleym@merrimack.edu
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All information, except education, is for the period 2000 to present.

Education

- Ph.D. in Mathematics, University of Notre Dame, Notre Dame, IN, 1983
- M.A. in Mathematics, University of Notre Dame, Notre Dame, IN, 1980
- B.A. in Mathematics, Merrimack College, North Andover, MA, 1978
- Graduate computer science courses (4), University of Massachusetts-Lowell, 1984-1986
- Graduate data science course (1), Merrimack College, 2019

Work Experience

Merrimack College, North Andover, MA

Full Professor, 2001 to present

Associate Professor, 1988 to 2001

Assistant Professor, 1983 to 1988

- Department of Computer and Data Sciences, 2022 to present
Program Director, Master of Science in Data Science
Teach algorithms and discrete structures, foundations of data science
- Department of Data Science and Analytics, 2020-2022
Department Chair, 2020-2022
Taught algorithms and discrete structures, foundations of data science, internship
- Department of Mathematics, 1983 to 2019
Department Chair/Co-chair, 2006-2009 and 2015-2019
Taught 30 undergraduate courses in mathematics, statistics, and computer science
- Northern Essex Community College, Haverhill, MA, adjunct lecturer, 2010-2014
Taught basic algebra

Select Recent Publications & Creative Achievements

Books

- Pioneers in Mathematics: The Birth of Mathematics: Ancient Times to 1300, Chelsea House/Infobase Publishing: New York, 2006
- Pioneers in Mathematics: The Age of Genius 1300-1800, Chelsea House/Infobase Publishing: New York, 2006
- Pioneers in Mathematics: The Foundations of Mathematics 1800-1900, Chelsea House/Infobase Publishing: New York, 2006
- Pioneers in Mathematics: Modern Mathematics 1900-1950, Chelsea House/Infobase Publishing: New York, 2006
- Pioneers in Mathematics: Mathematics Frontiers 1950 to the Present, Chelsea House/Infobase Publishing: New York, 2006
[Pioneers in Mathematics book set was translated and published in Chinese by Shanghai Scientific Publishers, 2007; in Korean by Ilchulbong Publishers, 2008; and in Japanese by

Seidosha Publishers, 2009, listed on Mathematical Association of America's Basic Library List, 2010-2018.]

- Elementary Functions for Calculus, with Frank Eccles, Fourth Edition, 2002
- An Introduction to Discrete Mathematics, Third Edition, McGraw-Hill, Dubuque, IA, 2000
- Calculus for Business, third printing with corrections, McGraw-Hill, Dubuque, IA, 2000

Refereed Articles in Academic Journals

- "Automorphism Groups of Plane Curves", with Harry D'Souza, *Communications in Algebra*, vol. 32, no. 8 (October, 2004), pp. 2885-2894

Presentations at National Conferences, Regional Conferences, and Guest Lectures

- "Digging into the Real Numbers: Data Science as an Offering for Early College Students", Russell Olwell, Joanna Blanchard, Angeline Setiawan, Michael Bradley, 2022 Inaugural Florida Project Kaleidoscope (PKAL) Network Meeting, American Association of College and Universities, virtual conference, Adapting to the Ever-Changing Higher Education Landscape, May 11, 2022
- "Teaching Data Science to Early College High School Students: A Head Start for STEM Equity in Massachusetts", Russell Olwell, Joanna Blanchard, Angeline Setiawan, Michael Bradley, 2022 Massachusetts Project Kaleidoscope (PKAL) Regional Network Winter Meeting, American Association of College and Universities, virtual conference, Developing Equity and Inclusion at the Department Level, February 1, 2022
- "Ten Math Problems Inspired by Srinivasa Iyengar Ramanujan", guest lecture at Gordon College Math Forum, Wenham, MA, November 15, 2018
- "Automorphism and Collineation Groups of Good Curves", presented by co-author Harry D'Souza, Summer Institute in Algebraic Geometry, July 25 – August 12, 2005, University of Washington, Seattle, WA

Workshops Presented

- "Four Fours Problem", led workshop for faculty at Arlington Middle School, Lawrence, MA, December 4, 2019
- "The People behind the Formulas: Using the Life Stories of Famous Mathematicians to Enhance the Teaching of Mathematics", Graduate Institute for Teachers, November 16, 2007, Merrimack College

Service

(internal and external)

Department of Computer and Data Sciences – graduate program director for data science (2022-present), search committees for full-time faculty hires, open house/accepted student reception/orientation

Department of Data Science and Analytics – chair (2020-2022), work with committee to develop new curriculum for MS Data Science program, meet with industry advisory boards, search committee for full-time faculty hires, annual faculty evaluations, course scheduling, open houses/accepted student receptions/webinars (25 times)

Department of Mathematics – co-chair (2015-19), chair (2006-09), chair of five-year self-study/program evaluation (2014), faculty advisor to Math Team (2006-19), chair of Kearns Award Selection committee (2008-21), search committee for full-time faculty hires (3 times), organized department's 50th year reunion (2009), area committees for departmental tenure candidates (5 times), open houses/accepted student receptions (27 times)

School of Science and Engineering – Area Selection Committee vice-chair (2021), ad hoc Committee on Directed Study and Directed Research (2021), Merrimack Institute for Computation and Analytics (MICA) committee (2020-2021), Murray Fellowship Selection Committee (2020, 2021), BS in Data Science committee (2017-19), Steering Committee for Masters Degree Programs in Data Science and Business Analytics (2017-19), Science and Engineering Visioning Committee (2016-17), Faculty/Staff Ambassador for Campaign for Good (2017), Best Practices in Teaching and Learning Committee (2010-12), Dean Search Committee (2009), Strategic Planning Committee (2008-09), STEM committee (2004-06), EIT/FE review session for civil engineering majors (4 times), area committees for tenure and promotion candidates (14 times)

College Committees – Appointment, Rank and Tenure committee (7 times), Appeals committee (5 times), Faculty Grant Committee (2021-2022 co-chair), NECHE Advisory Group - Standard 4: Academic Program (Undergraduate) (2021), Honorary Degrees Committee (2016-17), Faculty Advisory Committee on Continuing Education (2011-12), Quantitative Reasoning Committee (2010-12), Presidential Search Committee (2008, 2010), Faculty Advisory Board for Stevens Learning Center (2007-10), College Wide Strategic Planning Committee (2007), AAUP Chapter officer (2002-07), Enrollment Management Strategic Planning Committee (2002-05), Diversity Education Center Advisory Board (2004-05), Faculty Advisory Board of the Center for Augustinian Study and Legacy (2000-01), area committees for tenure and promotion candidates (8 times)

Other Campus Service – advisor/mentor/advocate for tenure-track and non-tenure-track faculty (18 times), guest lectures/presentations on campus (33 times), panelist for AAUP Tenure Forum (4 times), liturgical choir for special events (2014-19, 2022), Relay for Life (2013-19), faculty-student intramural soccer team (2010-15), Merrimack College Federal Credit Union Board of Directors (2006-13)

Service to the profession – Data researcher for Association of Women in Mathematics' Notable Women in Mathematics playing card project (2019)

Other Info

(e.g., Grants, Conferences, Professional Development, etc.)

Grants

- External - funded (2010-2011) - Co-Principal Investigator on TeraGrid grant "A Computational Approach to Ramsey Theory" with David Toth (Principal Investigator) and Stephan Krach (Student Researcher). Awarded 150,000 hours (Service Units) of CPU time on TeraGrid supercomputer systems (approximate value \$150,000). TeraGrid resources provided by the Louisiana Optical Network Initiative (LONI), the National Center for Supercomputing Applications (NCSA), Purdue University, and the Texas Advanced Computing Center (TACC). Grant number TG-DMS100031.
- External - not funded (2010) Co-Principal Investigator for NSF STEP-STEM program
- External - not funded (2009) Co-Principal Investigator for NSF STEP-STEM program
- Internal – funded – (2015) Provost Innovation Fund Grant Committee to Design New Math Classrooms
- Internal – funded (2007) - Faculty Development Grant - to revise precalculus textbook
- Internal – funded (2005) - Faculty Development Grant - to work on *Pioneers in Mathematics* book series
- Internal – funded (2004) - Faculty Development Grant - to work on *Pioneers in Mathematics* book series

Honors and Awards

- Edward G. Roddy Outstanding Teacher Award, Merrimack College, 2001

- Veracundus Award (for service to the college), Merrimack College, 2011
- Pi Mu Epsilon National Mathematics Honor Society, 2016 to present
- Albert Nelson Marquis Lifetime Achievement Award, 2017
- Marquis Who's Who in the World, 2007
- Marquis Who's Who in America, 2006
- Who's Who Among America's Teachers, 2007

Professional Memberships

- Mathematical Association of America (MAA), 1985 to present
- History of Mathematics Special Interest Group of the Mathematical Association of America (HOM-SIGMAA), 2002 to present
- Mathematics and Sports Special Interest Group of the Mathematical Association of America (Sports SIGMAA), 2019 to present