Nathan Jones
Curriculum Vitæ – May 2021

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Work Address:
University of Illinois at Chicago
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Current position

- **Research Associate Professor, Department of Mathematics, Statistics and Computer Science, University of Illinois at Chicago**, Chicago, Illinois, USA (August 2016 – present)

Education

- **University of California at Los Angeles**, Los Angeles, CA, USA
  Ph.D. in Mathematics, June, 2005
  Dissertation under the supervision of Prof. William Duke:
  Almost all elliptic curves are Serre curves.
- **University of Utah**, Salt Lake City, UT, USA
  M.S. in Mathematics, May, 2000
- **University of California at Berkeley**, Berkeley, CA, USA
  B.A. in Mathematics, May, 1997

Previous Positions

- **Research Assistant Professor, Department of Mathematics, Statistics and Computer Science, University of Illinois at Chicago**, Chicago, Illinois, USA (2014 – August 2016)
- **Assistant Professor, Department of Mathematics, University of Mississippi**, Oxford, MS, USA (2009 – 2014)
- **Researcher/Member, Mathematisches Institut Universität Göttingen**, Göttingen, Germany (2012)
- **Researcher/Member, Institute for Advanced Study**, Princeton, NJ, USA (2010)
- **Researcher/Member, Max Planck Institute for Mathematics**, Bonn, Germany (2009)
- **Researcher/Member, Hausdorff Research Institute for Mathematics**, Bonn, Germany (2009)
- **Researcher/Member, Fields Institute for Research in the Mathematical Sciences**, Toronto, ON, Canada (2008)
- **Researcher/Postdoctoral Fellow, Centre de Recherches Mathématiques**, Montréal, QC, Canada (2005 – 2008)

Research Interests

Number Theory, Arithmetic Geometry

Research Grants & Awards

- **UIC Honoring Our Professors' Excellence (HOPE) Award (2019)**
- **UIC Mathematics Department Teaching Award (2015)**
- **Liberal Arts and Sciences Undergraduate Research Initiative (LASURI) award (2015-2016)**

  (awarded by the University of Illinois at Chicago)
- **National Security Agency Young Investigator's Grant (2012-2014)**
- **Ralphe E. Powe Junior Faculty Enhancement Award (2011-2013)**

  (awarded by Oak Ridge Associated Universities)
- **University of Mississippi Summer Research Grant (2010, 2011, 2014)**

Publications

24. N. Jones, F. Pappalardi and P. Stevenhagen *On never-primitive points for elliptic curves over* $\mathbb{Q}$, in preparation, 13 pages.

23. N. Jones, *Theta functions and modular correspondences*, preprint, 13 pages.

22. A.C. Cojocaru, H. Iwaniec and N. Jones, *The average asymptotic behaviour of the Frobenius fields of an elliptic curve*, preprint, 50 pages.

21. N. Jones and K. Vissuet, *Elliptic curves with missing Frobenius traces*, preprint, 47 pages.

20. N. Jones and K. McMurdy, *Elliptic curves with non-abelian entanglements*, preprint, 32 pages.

19. H. Chen, N. Jones, and V. Serban, *A Lang-Trotter Conjecture for products of non-CM elliptic curves*, preprint, 40 pages.

18. N. Jones and C. McLeman, *Cohen-Lenstra-Gerth Heuristics via Automorphism Counts*, preprint, 11 pages.

17. A.C. Cojocaru and N. Jones, *Degree bounds for projective division fields associated to elliptic modules with a trivial endomorphism ring*, to appear in J. Théor. Nombres Bordeaux.

16. N. Jones, *A bound for the conductor of an open subgroup of* GL_2 *associated to an elliptic curve*, Pacific J. Math **308** (2020), no. 2, 307–331.

15. R. Bell, C. Blakestad, A.C. Cojocaru, A. Cowan, N. Jones, V. Matei, G. Smith, and I. Vogt; *Constants in Titchmarsh divisor problems for elliptic curves*, Research in Number Theory **6** (2020) no. 1, Art. 1, 24p.

14. S. Holmin, N. Jones, P. Kurberg, C. Mcleman and K. Petersen, *Missing class groups and class number statistics for imaginary quadratic fields*, Experimental Mathematics, **28** (2019) no. 2, 233–254.

13. N. Jones, *A rigidity phenomenon for power maps*, International Mathematics Research Notices, **2017** (2017) no. 24, 7551–7579.

Publications (continued)

12. J. Brau and N. Jones, *Elliptic curves with* 2*-torsion contained in the* 3*-torsion field*, Proceedings of the American Mathematical Society, **144** (2016), 925–936.

11. R. Daileda and N. Jones, *On primitivity of Dirichlet characters*, International Journal of Number Theory **11** (2015), 1913–1939.

10. N. Jones, *GL_2-representations with maximal image*, Mathematical Research Letters **22** (2015) no. 3, 803–839.

9. N. Jones, *Elliptic aliquot cycles of fixed length*, Pacific Journal of Mathematics **263** (2013) no. 2, 353–371.

8. N. Jones, *Pairs of elliptic curves with maximal Galois representations*, Journal of Number Theory **133** (2013), 3381–3393.

7. A.C. Cojocaru, D. Grant and N. Jones, *One-parameter families of elliptic curves over $\mathbb{Q}$ with maximal Galois representations*, Proceedings of the London Mathematical Society **103** (2011) no. 4, 654–675.

6. N. Jones, *Primes p for which $\#E(\mathbb{F}_p)$ has only large prime factors*, appendix to *Geometry and arithmetic of verbal dynamical systems on simple groups*, by T. Bandman, F. Grunewald, B. Kunyavskii; in *Groups, Geometry, and Dynamics* - a volume dedicated to W. Magnus, EMS Publishing House **4** (2010) no. 4, 607–655.

5. N. Jones, *Almost all elliptic curves are Serre curves*, Transactions of the American Mathematical Society **362** (2010), 1547–1570.

4. N. Jones, *Averages of elliptic curve constants*, Mathematische Annalen **345** (2009) no. 3, 685–710.

3. S. Baier and N. Jones, *A refined version of the Lang-Trotter conjecture*, International Mathematics Research Notices **2009** (2009) no. 3, 433–461.

2. N. Jones, *A bound for the torsion conductor of a non-CM elliptic curve*, Proceedings of the American Mathematical Society **137** (2009), 37–43.

1. N. Jones, *Trace formulas and class number sums*, Acta Arithmetica **132** (2008) no. 4, 301–313.

Invited Lecture Series

• Mini-course on *Serre's Open Image Theorem*
Institute of Mathematics of the Romanian Academy, Bucharest, Romania, August 2019.
(*Invited Guest Lecturer*. The course is aimed at training doctoral students and researchers on current topics in Galois representations coming from arithmetic.)

• Mini-course on *Galois representations*
Roma Tre University, Rome, Italy, May 2015.
(*Invited Visiting Professor*. The course is aimed at training doctoral students and researchers on current topics in Arithmetic Geometry.)

• Mini-course on *Frobenius distributions for elliptic curves*
Centre International de Rencontres Mathématiques Research School: Frobenius Distributions on Curves, Luminy, France, February 2014.
(*Invited Conference Lecturer*. The course was aimed at training doctoral students and researchers on current topics in Arithmetic Geometry.)

Conference Presentations

• Eighth Bucharest Number Theory Day, via Zoom, December 2020; *A Lang-Trotter conjecture for products of elliptic curves.*

• Seventh Bucharest Number Theory Day, Institute of Mathematics of the Romanian Academy, Bucharest, Romania, August 2019; *Elliptic curves with missing Frobenius traces.*

• Sixth Bucharest Number Theory Day, Institute of Mathematics of the Romanian Academy, Bucharest, Romania, July 2018; *Frobenius statistics of elliptic curves and entanglement fields.*

• A Celebration of CICMA's Postdoctoral Program Montreal, Canada, July 2018; *Never-Primitive points for elliptic curves over* $\mathbb{Q}$.

• Connecticut Summer School in Number Theory (CTNT 2018), University of Connecticut, Connecticut, June 2018; *Never-primitive points on elliptic curves over the rationals.*

• International Conference on Mathematics and Statistics – Special Session on Analytic Number Theory University of Memphis, Tennessee, May 2018; *Elliptic curves with non-abelian entanglements.*

• Fifth Bucharest Number Theory Day, Institute of Mathematics of the Romanian Academy, Bucharest, Romania, July 2017; *Elliptic curves with non-abelian entanglements.*

• Fourth Bucharest Number Theory Day, Institute of Mathematics of the Romanian Academy, Bucharest, Romania, July 2016; *Never-primitive points on elliptic curves over the rationals.*

• American Mathematical Society Fall Southeastern Sectional Meeting – Special Session on Elliptic Curves, University of Georgia, Athens, GA, March 2016; *Elliptic curves with non-abelian entanglements.*

• 2015 Midwest Number Theory Conference for Graduate Students and Recent PhD's, University of Illinois at Chicago, Chicago, IL, October 2015; *Images of Galois representations associated to elliptic curves.*

• Third Bucharest Number Theory Day, Institute of Mathematics of the Romanian Academy, Bucharest, Romania, August 2015; *Elliptic curves with non-abelian entanglement fields.*

• 29-th Journées Arithmétiques, University of Debrecen, Hungary, July 2015; *The distribution of class groups of imaginary quadratic fields.*

• Eighth Congress of Romanian Mathematicians, University of Iasi, Romania, June 2015; *The distribution of class groups of imaginary quadratic fields.*

• The first mini-symposium of the Roman Number Theory Association, Università Europea di Roma, Italy, May 2015; *The distribution of class groups of imaginary quadratic fields.*

• American Mathematical Society Fall Southeastern Sectional Meeting – Special Session on Connections in Number Theory, University of North Carolina at Greensboro, Greensboro, NC, USA, November 2014; *A local-global principle for power maps.*

• Centre de Recherches Mathématiques Workshop: Statistics and Number Theory, Montréal, QC, Canada, September 2014; *A local-global principle for power maps.*

Conference Presentations (continued)

• Second Bucharest Number Theory Day, Institute of Mathematics of the Romanian Academy, Bucharest, Romania, July 2014; *Elliptic curves with* 2*-torsion contained in the* 3*-torsion field.*

• First Bucharest Number Theory Day, Institute of Mathematics of the Romanian Academy, Bucharest, Romania, June 2013; *A local-global principle for power maps.*

• Collaborative Explorations and Developments in Arithmetic Research, Chicago, Illinois, USA, May 2013; *An alternative view of primitivity of Dirichlet characters.*

• American Mathematical Society Joint Mathematical Meetings – Special Session on Arithmetic Statistics, San Diego, California, USA, January 2013; *An alternative view of primitivity of Dirichlet characters.*

• Workshop on Automorphic Forms and L-Functions, Institute of Mathematics of the Romanian Academy, Bucharest, Romania, June 2012; *An alternative view of primitivity of Dirichlet characters.*

• American Mathematical Society Fall Southeastern Sectional Meeting – Special Session on Modular Forms, Elliptic Curves and Related Topics, Wake Forest University, Winston-Salem, NC, USA, September 2011; *The Lang-Trotter conjecture for Frobenius fields.*

• Palmetto Number Theory Series XVI, Emory University, Atlanta, GA, USA, September 2011; *Making imprimitive Dirichlet characters behave primitively.*

• Canadian Mathematical Society Summer Meeting - Scientific Session on L-Functions and Number Theory, University of Alberta, Edmonton, AB, Canada, June 2011; *The Lang-Trotter conjecture for Frobenius fields.*

• Arithmetic Statistics Workshop, Mathematical Sciences Research Institute, Berkeley, CA, USA, April 2011; *Images of Galois representations associated to elliptic curves.*

• Palmetto Number Theory Series XV, Clemson University, Clemson, SC, USA, February 2011; *Elliptic aliquot cycles of fixed length.*

• Southern Regional Algebra Conference, Auburn University Montgomery, Montgomery, AL, USA, March 2010; *When is the Koblitz constant positive?*

• Palmetto Number Theory Series XII, Clemson University, Clemson, SC, USA, February 2010; *When is the Koblitz constant positive?*

• Park City Mathematical Institute Summer School *Arithmetic of L-Functions,* Park City, UT, USA, July 2009; *Serre curves in one-parameter families.*

• Research Workshop *Diophantine equations,* Hausdorff Research Institute for Mathematics, Bonn, Germany, April 2009; *Serre curves in one-parameter families.*

• Second Canada-France Congress, Université du Québec à Montréal, Montréal, QC, Canada, June 2008; *Serre curves in one-parameter families.*

• 22-nd Annual Workshop on Automorphic Forms and Related Topics, Texas A&M University, College Station, TX, USA, March 2008; *A refined version of the Lang-Trotter conjecture.*

• Diophantine Equations via Analytic Number Theory, University of Bristol, Bristol, United Kingdom, July 2007; *Averages of Lang-Trotter constants.*

Conference Presentations (continued)

- Journées Arithmétiques, University of Edinburgh, Edinburgh, United Kingdom, July 2007; *Averages of Lang-Trotter constants.*
- Number Theory Fest, University of Illinois at Urbana-Champaign, Urbana, IL, USA, May 2007; *Averages of Lang-Trotter constants.*
- Canadian Number Theory Association 9-th Meeting, University of British Columbia, Vancouver, BC, Canada, July 2006; *Almost all elliptic curves are Serre curves.*
- 19th Annual Workshop on Automorphic Forms and Related Topics, University of North Texas, Denton, TX, USA, March 2005; *Almost all elliptic curves are Serre curves.*

Seminar/ Colloquium Presentations

- Number Theory Seminar, University of Missouri, Columbia, MO, USA, April 2015
- Number Theory Seminar, University of Illinois at Chicago, Chicago, IL, USA, February 2015
- Algebra Seminar, University of Connecticut, Storrs, CT, USA, November 2014
- Number Theory Seminar, University of Illinois at Chicago, Chicago, IL, USA, September 2014
- Number Theory Seminar, University of Illinois at Urbana-Champaign, Urbana, IL, USA, April 2013
- Number Theory Seminar, University of Illinois at Chicago, Chicago, IL, USA, April 2013
- Number Theory Seminar, Ohio State University, Columbus, OH, USA, December 2011
- Algebra & Discrete Mathematics Seminar, Clemson University, Clemson, SC, USA, February 2011
- Seminar: Algebra and its applications, Florida State University, Tallahassee, FL, USA, February 2010
- Number Theory Seminar, Max Planck Institüt für Mathematik, Bonn, Germany, June 2009
- Arithmetic Algebraic Geometry Seminar (Seminarium z Arytmetycznej Geometrii Algebraicznej), Poznan University, Poznan, Poland, May 2009
- Mathematics Colloquium, Jacobs University, Bremen, Germany, March 2009
- Mathematics Colloquium, University of Mississippi, Oxford, MS, USA, March 2009
- Seminar on Diophantine Equations (Oberseminar Diophantische Gleichungen), The Hausdorff Research Institute for Mathematics, Bonn, Germany, January 2009
- Arithmetic Geometry Members' Seminar, The Fields Institute for Research in Mathematical Sciences, Toronto, ON, Canada, September 2008
- Number Theory and Combinatorics Seminar, University of Lethbridge, Lethbridge, AB, Canada, May 2008
- Mathematics Colloquium, Tulane University, New Orleans, LA, USA, March 2008
- Mathematics Colloquium, Clemson University, Clemson, SC, USA, February 2008

Seminar/ Colloquium Presentations (continued)

- Number Theory Seminar, Stanford University, Stanford, CA, USA, November 2007
- Number Theory Seminar, Texas A&M University, College Station, TX, USA, October 2007
- Number Theory Seminar (DNA Seminariet), Institutionen för matematik, KTH, Stockholm, Sweden, June 2007
- Analytic Number Theory Seminar, Université de Montréal, Montréal, QC, Canada, May 2007
- Number Theory Seminar, University of Illinois at Chicago, Chicago, IL, USA, April 2007
- Analytic Number Theory Seminar, Université de Montréal, Montréal, QC, Canada, November 2006
- Number Theory Seminar, Dartmouth College, Hanover, NH, USA, May 2006
- Québec-Vermont Number Theory Seminar, CRM, Montréal, QC, Canada, February 2006
- Number Theory Seminar, University of Ottawa, Ottawa, ON, Canada, February 2006
- Analytic Number Theory Seminar, Université de Montréal, Montréal, QC, Canada, October 2005
- Number Theory Seminar, UCLA, Los Angeles, CA, USA, October 2004

Student Supervision & Mentoring

- 2020-Present, **Sung-Min (John) Lee**, Ph.D. student at the University of Illinois at Chicago (USA); I am currently serving as John's Ph.D. dissertation advisor.
- 2018-Present, **Jacob Mayle**, Ph.D. student at the University of Illinois at Chicago (USA); I am currently serving as Jacob's Ph.D. dissertation advisor.
- 2015-2021, **Kevin Vissuet**, Ph.D. student at the University of Illinois at Chicago (USA); Kevin defended his Ph.D. thesis in January 2021 and will graduate in May 2021.

2016, **Neelima Borade**; undergraduate student at the University of Illinois at Chicago (USA)

I supervised Neelima on an undergraduate project that undertook heuristic and numerical investigations of generalizations of Collatz's conjecture.

2016, **Matthew Fitzpatrick**, **Ayman Hussein** and **Shayne Officer**; undergraduate students at the University of Illinois at Chicago (USA)

I supervised Matthew, Ayman and Shayne on an undergraduate project entitled "Statistics of Class Groups" in the UIC Math Department's Mathematical Computing Laboratory (MCL).

2016, **Hao Chen** (University of Washington), **Daniel Miller** (Cornell University) and **Vlad Serban** (Northwestern University); Ph.D. students.

Jointly with A.C. Cojocaru, I mentored Hao, Daniel and Vlad on a research project at the 2016 Arizona Winter School at the University of Arizona. This collaboration has resulted in a joint paper "A Lang-Trotter Conjecture for products of non-CM elliptic curves" that is currently submitted for publication.

Student Supervision & Mentoring (continued)

2016, **Renee Bell** (MIT), **Clifford Blakestad** (University of Colorado Boulder), **Alexander Cowan** (Columbia University), **Vlad Matei** (University of Wisconsin Madison), **Geoffrey Smith** (Harvard University) and **Isabel Vogt** (MIT); Ph.D. students.
Jointly with A.C. Cojocaru, I mentored Renee, Clifford, Alexander, Vlad, Geoff and Isabel on a research project at the 2016 Arizona Winter School at the University of Arizona. This collaboration has resulted in a joint paper "Constants in Titchmarsh divisor problems for elliptic curves" that has appeared in *Research in Number Theory*.

- 2015-2016, **Matthew Fitzpatrick**, undergraduate student at the University of Illinois at Chicago (USA)

  I was Matthew's faculty mentor for a 2015-2016 research project on elliptic curves, which was funded by a LASURI Award (College of Liberal Arts and Sciences Undergraduate Research Initiative) from the University of Illinois at Chicago.

- 2014, **Julio Brau**, Ph.D. student at Cambridge University (United Kingdom).
  I met Julio while teaching a mini-course at a Research Winter School in Luminy (France) in February 2014. Our collaboration resulted in the joint paper *Elliptic curves with* 2*-torsion contained in the* 3*-torsion field*, Proc. Amer. Math. Soc. **144** (2016), 925–936.

- 2010-2011, **Micheal Azlin**, Master's student at the University of Mississippi (USA)

  Co-supervised with Micah Milinovich (Associate Professor, University of Mississippi).

Teaching Experience

- **Research Associate Professor, University of Illinois at Chicago (USA)**
  Course Instructor for:

  - *Number Theory for Applications* (MATH 436), Spring 2021
  - *Mathematical Analysis for Teachers* (MTHT 430), Fall 2019
  - *Graduate Analytic Number Theory* (MATH 515), Spring 2019, Fall 2017
  - *Calculus I* (MATH 180), Fall 2018
  - *Calculus III* (MATH 210), Fall 2020, Fall 2018, Spring 2013
  - *Advanced Topics in Number Theory* (MATH 525), Spring 2018, Fall 2019
  - *Linear Algebra & Applications* (MATH 310), Spring 2018, Spring 2015, Fall 2014, Spring 2013
  - *Calculus II* (MATH 181), Fall 2017
  - *Abstract Algebra for Teachers* (MTHT 435), Spring 2017
  - *Advanced Topics in Algebra* (MATH 531), Fall 2016
  - *Abstract Algebra* (MATH 330), Fall 2016, Fall 2014
  - *Codes and Cryptography* (MCS 425), Spring 2016
  - *Graduate Algebraic Number Theory* (MATH 514), Fall 2015
  - *Linear Algebra* (MATH 320), Fall 2015

Teaching Experience (continued)

- **Assistant Professor, University of Mississippi (USA)**
  Course Instructor for:
  - *Graduate Number Theory*, Spring 2014
  - *Ordinary Differential Equations*, Fall 2009, Spring 2010, and Spring 2011
  - *Honors Calculus I*, Fall 2009 and Fall 2011
  - *Calculus II*, Fall 2013 and Spring 2014
  - *Calculus III*, Fall 2011, Spring 2012 and Fall 2013
  - *Introduction to Proofs*, Spring 2010, Spring 2011 and Spring 2012
  - *Graduate Algebraic Number Theory*, Spring 2012

- **Research Assistant Professor, Concordia University (Canada)**
  Course Instructor for:
  - *Ordinary Differential Equations*, 2005 – 2008
  - *Calculus*, 2005 – 2008
  - *Linear Algebra*, 2005 – 2008

- **Teaching Assistant Consultant, University of California at Los Angeles (USA)**
  Teaching Assistant Consultant for a *training course to new graduate student teaching assistants* in 2004–2005.

- **Teaching Assistant, University of California at Los Angeles (USA)**
  Instructor for weekly discussion sections with undergraduate students for:
  - *Multivariate Calculus*, 2001 – 2003
  - *Linear Algebra*, 2001 – 2003
  - *Differential Equations*, 2001 – 2003
  - *Probability Theory*, 2001 – 2003
  - *Mathematical Game Theory*, 2001 – 2003

- **Central California Mathematics Project Lecturer, California State University, Stanislaus (USA)**
  Curriculum Developer and Lecturer for *intensive professional development mathematics courses for high school teachers* in Summer 2002.

- **Teaching Assistant at the University of Utah (USA)**
  Course Instructor for:
  - *Algebra*, 1998 – 2000
  - *Calculus*, 1998 – 2000
  - *Multivariable Calculus*, 1998 – 2000

Teaching Experience (continued)

- **ACCESS (Aliance for Collaborative Change in School Systems) Teaching Assistant, University of California at Berkeley (USA)**

  - Academic Advisor for *inner city high school advanced mathematics classes* during 1997-1998.

  - Curriculum Developer for *Mathematics for SAT preparation course* during 1997-1998.

- **Summer Bridge Workshop Leader, University of California at Berkeley (USA)**
  Instructor for daily discussion sections for an intensive *PreCalculus course* in Summer 1997.

Academic Community Service

- **Journal peer refereeing**
  2006 – present, referee for research journals, including:

  - *Acta Arithmetica*
  - *Algebra & Number Theory*
  - *American Journal of Mathematics*
  - *Experimental Mathematics*
  - *International Journal of Number Theory*
  - *Journal of the London Math. Society*
  - *Journal of Number Theory*
  - *Linear and Multilinear Algebra*
  - *Proceedings of the Cambridge Philosophical Society*
  - *Proceedings of the London Math. Society*

- **Conference organizing**

  - June 2020, organizer of *Chicago Number Theory Day*, via Zoom
  - December 2015, co-organizer of *Analytic Number Theory*, Special Session at the Winter Meeting of the Canadian Mathematical Society, Montréal, QC, Canada
  - May 2015, organizer of *Chicago Number Theory Day*, University of Illinois at Chicago (USA)
  - March 2013, co-organizer of *Modern Methods in Analytic Number Theory*, Special Session at the Spring Southeastern Sectional Meeting of the American Mathematical Society, University of Mississippi (USA)

Academic Community Service (continued)

- **Seminar organizing**
  - 2014 – present, co-organizer of the *Number Theory Seminar* at the University of Illinois at Chicago (USA)
  - 2009 – 2014, co-organizer of the *Algebra & Number Theory Seminar* at the University of Mississippi (USA)
  - 2006 – 2008, co-organizer of the *Analytic Number Theory Seminar* at Univérsité de Montréal (Canada)
- **Grant reviewing**
  - 2012 – present, reviewer for National Security Agency research grants
- **Academic examining**
  - 2019, examiner on the Doctoral Dissertation Committee for Darko Trifunovski, a Ph.D. student at the University of Illinois at Chicago (USA)
  - 2019, examiner on the Doctoral Dissertation Committee for Dylon Chow, a Ph.D. student at the University of Illinois at Chicago (USA)
  - 2019, examiner on the Master's Thesis Committee for Stephanie Reyes, a Master's student at the University of Illinois at Chicago (USA)
  - 2019, examiner on the Master's Thesis Committee for William Dallesandro, a Master's. student at the University of Illinois at Chicago (USA)
  - 2014, examiner on the Doctoral Dissertation Committee for Caroline Turnage-Butterbaugh, a Ph.D. student at the University of Mississippi (USA)
  - 2011, examiner on the Master's Thesis Committee for Amanda Acosta, a Master's student at the University of Mississippi (USA)
  - 2010, examiner on the Senior Honors Thesis Committee for Matt Stephenson, a senior mathematics major at the University of Mississippi (USA)
- **Community outreach**
  - 2019 – 2020, co-leader of *Chicago Youth Math Studio*, an extra-curricular math club for elementary school students in Chicago (USA)
  - 2014 – 2015, co-leader of a K-12 Math Club at an independent school in Chicago (USA)

University Service

- **University service**
  Faculty member:
  - 2015 – Present, *Faculty Senate*, University of Illinois at Chicago (USA)
  - 2015 – 2017, *Faculty Senate Academic Services Committee* University of Illinois at Chicago (USA)
  - 2013 – 2014, *University Senate*, University of Mississippi (USA)
- **Departmental service**
  Faculty member:
  - 2016 – Present, *Graduate Studies Committee*, Department of Mathematics, Statistics and Computer Science, University of Illinois at Chicago (USA)
  - 2014 – Present, *Admissions, Fellowships & Assistantships Committee*, Department of Mathematics, Statistics and Computer Science, University of Illinois at Chicago (USA)
  - 2015 – 2018, *Math Club Advisor*, Department of Mathematics, Statistics and Computer Science, University of Illinois at Chicago (USA)
  - 2014 – 2016, *Undergraduate Studies Committee*, Department of Mathematics, Statistics and Computer Science, University of Illinois at Chicago (USA)
  - 2013 – 2014, *Student Awards and Scholarships Committee*, Department of Mathematics, University of Mississippi (USA)
  - 2013 – 2014, *Algebra PhD Comprehensive Exam Committee*, Department of Mathematics, University of Mississippi (USA)
  - 2011 – 2012, *Student Awards and Scholarships Committee*, Department of Mathematics, University of Mississippi (USA)
  - 2011 – 2012, *Strategic Planning Committee*, Department of Mathematics, University of Mississippi (USA)
  - 2011 – 2012, *Undergraduate Teaching Committee*, Department of Mathematics, University of Mississippi (USA)
  - 2010 – 2011, *Algebra Committee*, Department of Mathematics, University of Mississippi (USA)
  - 2009 – 2010, *Departmental Grants Committee*, Department of Mathematics, University of Mississippi (USA)

References Available upon request.