Thomas D. Luckner
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Education

University of South Carolina   Columbia, SC
Ph.D. Mathematics   (August 2023)
- Coursework topics include: Computational Number Theory, Algebraic Number Theory, Analytic Number Theory, Transcendental Number Theory, Graph Theory, Approximation Theory, etc.
- Dissertation: Widely digitally delicate Brier primes and irreducibility results for some classes of polynomials (Advised by Dr. Michael Filaseta)

Eastern Connecticut State University (ECSU)   Willimantic, CT
Bachelor of Science in Mathematics and Economics, *Summa Cum Laude* with Honors   (May 2018)
- Honors Thesis: Lattice Tetrahedra (Advised by Dr. Mizan Khan)

Technical Skills

- Experience with Matlab, C, C++, Python, R, Minitab, Magma, SageMath, LaTex, Microsoft Office

Memberships

- American Mathematical Society (AMS)
- Mathematical Association of America (MAA)

Work Experience

Flagler College, Saint Augustine, FL   (2023-present)
- Assistant Professor of Mathematics
  - Design class structure and instruct various levels of undergraduate mathematics
  - Service the college by engaging with activities outside of my academic duties
  - Improve as a professional in my field as both an educator and a scholar

University of South Carolina, Columbia, SC   (2018-2023)
- Mathematics Assessment of Prerequisite (MAP Test) Assistant   (Summer 2023)
  - Helped in the taking and improving of the MAP all students must take prior to registering for courses
- Instructor of Record   (2019-2023)
  - Design class structure and instruct various levels of undergraduate mathematics
- Mathematics Department Peer-mentoring Program Mentor   (2021-2022)
  - Facilitated small groups meetings to discuss strategies to better educate students in the classroom including but not limited to active learning strategies, classroom atmosphere, inclusivity, and more
  - Workshopped ways to improve our abilities as mentors including but not limited to roles in discussion, handling conflict in discussion, different forms of discourse, and more
  - Learned/discussed ways to improve our abilities as instructors/mentors using the MAA's IPG book as goals
- Teaching Assistant   (2018-2019)
  - Run recitations and computer labs for MATH 141 (Calculus 1) and MATH 142 (Calculus 2)

Thule Inc., Milford, CT   (Summer 2018)
- Intern
  - Maximized pallets of product from a distribution center to in turn minimize cost
  - Computed cost efficiency for distribution licenses and alternatives for distribution planning software to optimize distribution spending

Analog Devices Inc., West Lafayette, IN   (Summer 2017)
- Cyber Security Engineering Intern
  - Learned the C programming language
  - Researched the original and a more modern/efficient algorithm for BCH error-correcting code
  - Implemented a BCH error-correcting code in C for commercial use

Eastern Connecticut State University, Willimantic, CT   (2014-2018)
- Head Math Tutor   (2015-2018)
  - Monitor coworkers to make sure they are on time and students are receiving the help they ask for
- Math Tutor   (2014-2015)
  - Supply students in a self-serving atmosphere with tutoring in all levels of college mathematics

Teaching Experience

Flagler College
- Fall 2023
  - MAT 171 Business Calculus
  - MAT 335 Number Theory
  - MAT 203 Calculus III
- Spring 2024
  - MAT 171 Business Calculus
  - MAT 331 Abstract Algebra
  - MAT 203 Calculus III
  - CIS 115 Introduction to Python

University of South Carolina
- Spring 2023
  - MATH 151/152 Calculus I/II Workshops
- Fall 2022
  - MATH 111 Basic College Mathematics
  - MATH 151/152 Calculus I/II Workshops
- Summer 2022
  - MATH 241 Vector Calculus
- Spring 2022
  - MATH 115 Precalculus
- Fall 2021
  - MATH 111 Basic College Mathematics
- Summer 2021
  - MATH 374 Discrete Structures
- Spring 2021
  - MATH 151/152 Calculus I/II Workshops
- Fall 2020
  - MATH 344L/544L App. Linear Alg. Lab
- Summer 2020
  - MATH 344 Applied Linear Algebra
  - MATH 344L/544L App. Linear Alg. Lab
- Spring 2020
  - MATH 122 Calculus for Bus. And Sci.
- Fall 2019
  - MATH 115 Precalculus
- Summer 2019
  - MATH 122 Calculus for Bus. And Sci

Publications

Indagationes Mathematicae, Vol. 35, 1 (*published* – 1/1/2024)
- M. Filaseta and **T. Luckner**, *On nth order Euler polynomials of degree n that are Eisenstein*

Colloquium Mathematicum, Vol. 174, 2 (*published* – 11/17/2023)
- M. Filaseta, R. Groth and **T. Luckner,** *Generalized Sierpiński Numbers*

Integers, 23 (*published* – 10/2/2023)
- M. Filaseta, J. Juillerat and **T. Luckner**, *Consecutive primes which are widely digitally delicate and Brier numbers*

Proquest (*published* – 10/4/2023)
- **T. Luckner**, *Widely digitally delicate Brier primes and irreducibility results for some classes of polynomials*

Presentations

Joint Mathematics Meetings (JMM) of the MAA-Florida Section 2024, Florida Gulf Coast University, FL
- **T. Luckner,** *Widely Digitally Delicate Brier Primes* (Oral)

Joint Mathematics Meeting (JMM) 2024 – Special Session on Covering Systems, San Francisco, CA
- **T. Luckner,** *Consecutive primes which are widely digitally delicate and Brier numbers* (Oral-Invited Lecturer)

Integers Conference 2023, University of Georgia, GA
- **T. Luckner,** *Consecutive primes which are widely digitally delicate and Brier numbers* (Oral)

Graduate Colloquium Spring 2023, University of South Carolina, SC
- **T. Luckner,** *An Example Research Talk for Interviews: Covering Systems, Newton Polygons, and Other Constructive Proof Techniques* (Oral)

Palmetto Number Theory Series 34 (PANTS) 2022, University of North Carolina Charlotte, NC
- **T. Luckner,** *Consecutive primes which are widely digitally delicate and Brier numbers* (Oral)

National Conference for Undergraduate Research (NCUR) 2018, University of Central Oklahoma, OK
- **T. Luckner,** *Lattice Tetrahedra* (Oral)

Northeast Regional Honors Conference (NRHC) 2018, Providence, RI
- **T. Luckner,** *Lattice Tetrahedra* (Oral)

Northeast Regional Honors Conference (NRHC) 2017, Pittsburgh, PA
- **T. Luckner,** *Modular Sum-Set Application to the Sum of Two Squares (Poster)*

Northeast Regional Honors Conference (NRHC) 2016, Cambridge, MA
- A. Burkhart and **T. Luckner,** *Study of Special Cases in Prime Numbers (Poster)*

Celebrating Research Excellence and Artistic Talent at Eastern Conference (Create) 2016, Eastern Conn. State Univ., CT
- A. Burkhart and **T. Luckner,** *Study of Special Cases in Prime Numbers (Poster)*

Attended Conferences

- Joint Mathematics Meetings (JMM) of the MAA-Florida Section 2024, Florida Gulf Coast University, FL
- Joint Mathematics Meeting (JMM) 2024, San Francisco, CA
- Integers Conference 2023, University of Georgia, GA
- Palmetto Number Theory Series 35 (PANTS) 2022, University of South Carolina, SC
- Palmetto Number Theory Series 34 (PANTS) 2022, University of North Carolina Charlotte, NC
- Palmetto Joint Arithmetic, Modularity, and Analysis Series 2 (PAJAMAS) 2020, Online
- Palmetto Number Theory Series 33 (PANTS) 2019, Clemson University, SC
- Palmetto Number Theory Series 32 (PANTS) 2019, University of North Carolina Charlotte, NC
- Palmetto Number Theory Series 31 (PANTS) 2018, University of South Carolina, SC
- Southeast Regional Meeting on Numbers (SERMON) 2019, University of North Carolina Greensboro, NC
- National Conference for Undergraduate Research (NCUR) 2018, University of Central Oklahoma, OK
- Northeast Regional Honors Conference (NRHC) 2018, Providence, RI
- Northeast Regional Honors Conference (NRHC) 2017, Pittsburgh, PA
- Northeast Regional Honors Conference (NRHC) 2016, Cambridge, MA
- Celebrating Research Excellence and Artistic Talent at Eastern Conference (Create) 2016, Eastern Conn., CT

Notable Achievements

University of South Carolina
- Outstanding Graduate Teaching Award in Mathematics 2022

Eastern Connecticut State University
- Nominee for the Barry M. Goldwater Scholarship 2018
- Honors Program Service Award 2018
- Honors Thesis Fellowship 2017

Other Activities

University of South Carolina
- South Carolina High School Math Contest Coordinator 2019, 2020, 2023

Eastern Connecticut State University
- Honors Advisory Committee 2016-2017
- Math Club President 2016-2018
- Math Club Vice President 2015-2016
- Campus Activity Board Assistant Coordinator 2015-2017