John Clark

Curriculum Vitae

Education

2021–Present **PH.D. in Mathematics**, *University of Texas at Austin*, Austin, TX.

2020–2021 **PH.D. in Mathematics**, *Oklahoma State University*, Stillwater, OK.

2018–2020 **Master of Science in Mathematics**, *Oklahoma State University*, Stillwater, OK.

Thesis Title *Polynomials with Small Elliptic Mahler Measure Via Genetic Algorithms*

Advisor Dr Paul Fili

2012-2016 **Bachelor of Science in Mathematics**, *California Institute of Technology (Caltech)*, Pasadena, CA.

2010-2012 **Texas Academy of Mathematics and Science (TAMS) Program**, *University of North Texas*, Denton, TX.

Research Experience

Summer 2022 **Pomona Research in Mathematics Experience (PRiME) Research Assistant**, *Pomona College, Goins Group*, Claremont, CA.
Worked as a Research Assistant with Prof. Edray Goins, and 3 undergraduates on the research project "Monodromy Groups of Belyĭ Lattès Maps".

Summer 2020 **AIM-MCRN Summer School 2020 participant**, *Dynamics and data in the COVID-19 pandemic*.
Worked with other early career mathematicians on data-driven models with an emphasis on adaptive network models related to the COVID-19 pandemic

Summer 2015 **SURF participant**, *Caltech, Marcolli Group*, Pasadena, CA.
Worked with Farzad Fathizadeh in researching the relations between scalar curvature and characteristic in noncommutative two-tori when perturbed by Beltrami differentials.

Summer 2012 **Freshman Summer Research Institute participant**, *Caltech, Krishnan Group*, Pasadena, CA.
Generated a regression analysis between earthquake source parameters and intensities of resulting ground motions in the Los Angeles Basin

Honors & Fellowships

2021 Dean's Strategic Fellowship at UT Austin

Spring 2020 Best Graduate Student Talk in Number Theory Seminar at Oklahoma State

✉ *john.m.clark81@gmail.com*
https://web.ma.utexas.edu/users/jmc5946/index.html

Fall 2019 The Honor Society of Phi Kappa Phi

Spring 2019 O.H. Hamilton Award

Spring 2019 E.K. McLachlan Memorial Scholarship

2015-2016 Mellon Mays Undergraduate Fellowship

2015 Caltech Summer Undergraduate Research Fellowship

Teaching Experience

Spring 2021 **Instructor**, *Oklahoma State University*, Stillwater, OK.
Instructor for MATH1813 Preparation for Calculus

Fall 2020 **Instructor**, *Oklahoma State University*, Stillwater, OK.
Instructor for MATH1483 Mathematical Functions and Their Uses

Spring 2020 **Teaching Assistant**, *Oklahoma State University*, Stillwater, OK.
Held recitations and assisted in grading exams for MATH2103 Business Calculus

Fall 2019 **Instructor**, *Oklahoma State University*, Stillwater, OK.
Instructor for MATH1813 Preparation for Calculus

Summer 2019 **Teaching Assistant**, *Summer Studies at Duke TIP*, Durham, NC.
Worked with instructors to research, plan, and lead instructional activities for gifted middle and high school students in an accelerated learning environment.

Spring 2019 **Teaching Assistant**, *Oklahoma State University*, Stillwater, OK.
Held recitations and assisted in grading exams for MATH2103 Business Calculus

Fall 2016 **Volunteer Tutor**, *Durham Middle School*, Lewisville, TX.
Tutored 8th grade middle school students at Durham Middle School to help them pass the STAAR exam, which is mandatory for all students in the state of Texas in order to advance to higher grade levels.

Presentations

Summer 2022 **Elliptic Mahler Measure via Genetic Algorithms**, *PRiME Secret Seminar*, Pomona College, CA.

Spring 2022 **April Fools Day Talk**, *Sophex*, The University of Texas at Austin, TX.

Fall 2021 **Elliptic Mahler Measure via Genetic Algorithms**, *Sophex Talk*, The University of Texas at Austin, TX.

Spring 2020 **The Family of Lattès Maps**, *Number Theory Seminar*, Oklahoma State University, OK.

Fall 2019 **Elliptic Mahler Measure via Genetic Algorithms**, *Midwest Arithmetic Geometry Number Theory Series (MAGNTS)*, The Ohio State University, OH.
Poster Presentation

Industry Experience

Summer 2017 **Intern, Algorithms R&D**, *Wolfram Research*, Champaign, IL.
Worked with Devendra Kapadia in developing an online Calculus Course using the Wolfram Language. The course includes 38 lectures with exercises to work on, supplementary quizzes, and a sample exam with questions similar to those found on the AP Calculus AB exam