

Jack Kinseth — Curriculum Vitae

CONTACT

☎ +1(515)229-5088

✉ jkinseth@gmu.edu ✉ kinsethjr@gmail.com

📍 2706 9th St S #201, Arlington, VA 22204

EDUCATION

PhD in Mathematics

Aug. 2022 - May 2024

- George Mason University, Fairfax, VA
- Dissertation not finished

MS in Mathematics

Aug. 2022 - May 2024

- George Mason University, Fairfax, VA
- Emphasis in computational and applied mathematics

BS in Mathematics

Aug. 2018 - Dec. 2021

- Iowa State University, Ames, IA
- Minor in Philosophy
- Spring 2020 semester spent at KTH in Stockholm, Sweden

RESEARCH EXPERIENCE

Undergraduate Research Assistant

Jan. 2021 - Aug. 2021

- *Conditions for matchability in groups and field extensions* with Dr. Mohsen Aliabadi, Christopher Kunz, Haris Serdarevic, and Cole Willis as part of ISMaRT program and funded by LAS Dean's High Impact Award for Undergraduate Research in the amount of \$9,600.00. Published in *Linear and Multilinear Algebra*. Personal feature about the research on [Iowa State University College of Liberal Arts and Sciences website](#).

Undergraduate Research Assistant

Oct. 2018 - May 2019

- *A meta-analysis of Boolean network models reveals design principles of gene regulatory networks* with Dr. Claus Kadelka, Taras-Michael Butrie, Evan Hilton, and Haris Serdarevic. Published in *Science Advances*. Presented a poster detailing the project at [ISU Symposium on Undergraduate Research and Creative Expression \(SoURCE\)](#) with Haris Serdarevic on April 17, 2019, entitled *On the Construction of a Gene Regulatory Network Database for Meta-Analyses in Boolean Canalizing Functions*. See project website [here](#).

TECHNICAL SKILLS

Languages & Spreadsheets

- Proficient in Python, Java, \LaTeX , MATLAB, Mathematica, Macaulay2, Microsoft Excel, and R

AI & ML

- Experience with NumPy, Pandas, Matplotlib, scikit-learn, TensorFlow, and PyTorch Python libraries

SELECTED HONORS & AWARDS

T.C. Lim Graduate Award for Excellence in Teaching

- Two-time nominee
- For graduate teaching responsibilities during Fall 2022 semester; nominated Spring 2023
- For graduate teaching responsibilities during Fall 2023 semester; nominated Spring 2024

Dean's Graduate Student Award: Excellence in Teaching

- Nominee
- Fall 2022-Spring 2023 Academic Year

Phi Beta Kappa (Φ BK) Honor Society

- For excellence in liberal arts and sciences
- Inducted May 2021

LAS Dean's High Impact Award for Undergraduate Research

- Awarded for Summer 2021

Kingland Data Analytics in Liberal Arts and Sciences Scholarship

- Awarded for Fall 2020, Spring 2021 semesters

James L. Cornette Mathematics and Interdisciplinary Studies Scholarship

- Awarded for Fall 2020, Spring 2021 semesters

Fred Wright Mathematics Endowed Scholarship Fund

- Awarded for Fall 2021 semester

Will C. Jumper Award

- Awarded for Fall 2021 semester

SELECTED COURSEWORK (GEORGE MASON UNIVERSITY)

Algebra I (MATH 621)

- B
- Passed preliminary exam at the end of the Fall 2022 semester

Algebraic Geometry (MATH 725)

- A-

Commutative Algebra (MATH 724)

- A

Commutative Algebra 2 (MATH 697)

- A

Linear Analysis (MATH 675)

- A-
- Passed preliminary exam at the end of the Fall 2022 semester

Numerical Analysis (MATH 685)

- B+
- Passed preliminary exam at the end of the Fall 2023 semester

Numerical Solutions of Differential Equations (MATH 686)

- A-

Ordinary Differential Equations (MATH 677)

- A
- Passed preliminary exam at the end of the Fall 2023 semester

EDUCATING & TEACHING

Instructor of Record—George Mason University

Summer 2024

- Discrete mathematics I (MATH 125)

Graduate Teaching Assistant—George Mason University

Spring 2023, Spring 2024

- Calculus III (MATH 213)

Graduate Teaching Assistant—George Mason University

Fall 2022, Fall 2023

- Calculus I (MATH 113)

Supplemental Instructor—ISU Academic Success Center

Fall 2020, Spring 2021

- Differential equations & Laplace transforms (MATH 267)

Supplemental Instructor—ISU Academic Success Center

Fall 2019

- Multivariable calculus (MATH 265)

SERVICE & INVOLVEMENT

Fairfax Algebra Days (FAD) 2024

Spring 2024

- George Mason University Department of Mathematical Sciences
- Assisted organizers with the logistics of hosting this commutative algebra conference

MEGL (Mason Experimental Geometry Lab)

Spring 2024

- Management team

Math Tutoring Center

Spring 2024

- One-on-one tutoring with George Mason University undergraduates across all levels

Program for Advanced Teaching of Mathematics

Spring 2023, Fall 2023

- Teaching certification & mentorship

MATH 113 Lead Graduate Teaching Assistant

Fall 2023

- Trains & assists MATH 113 graduate teaching assistants

Student Mentoring Program

Fall 2023

- Paired with first-year graduate student

Graduate Learning Assistant—George Mason University

Summer 2023

- Co-director for three-week Ph.D. LaunchPad Program
- Prepared incoming graduate students for preliminary exams to be taken during their first year

Morgantown Algebra Days (MAD) 2023

Spring 2023

- West Virginia University School of Mathematical and Data Sciences
- Funded to attend commutative algebra conference

Private K-12 Math Tutor

Fall 2020, Spring 2021

- Planned and facilitated two one-hour tutoring sessions per week via Zoom
- Tutored on topics from elementary mathematics, pre-algebra, algebra I, and geometry