

Jack Kinseth — Curriculum Vitae

CONTACT

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

EDUCATION

PhD in Mathematics

Aug. 2022 - May 2028 (expected)

- George Mason University, Fairfax, VA

MS in Mathematics

Aug. 2022 - May 2024 (expected)

- 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. Uploaded to arXiv on July 19, 2021. 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. Uploaded to arXiv on September 2, 2020. To be 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

- Nominee
- For teaching responsibilities during Fall 2022 semester; nominated Spring 2023

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)

Commutative Algebra (MATH 724)

- A

Algebraic Geometry (MATH 725)

- A-

Algebra I (MATH 621)

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

Ordinary Differential Equations (MATH 677)

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

Partial Differential Equations (MATH 678)

- B-

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

EDUCATING & TEACHING

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)

- Multivariable calculus (MATH 265)

SERVICE & INVOLVEMENT

Morgantown Algebra Days (MAD) 2023

Spring 2023

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

Program for Advanced Teaching of Mathematics

Spring 2023, Fall 2023

- Teaching certification

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

Private K-12 Math Tutor

Fall 2020, Spring 2021, Spring 2024

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