Andrew B. Maurer

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Contact Info

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Summary

Motivated and independent mathematician with broad interests in technical fields including data science, open source software, and science education.

Andrew is **technically minded** and grasps abstract concepts quickly. By achieving a fundamental understanding of abstract notions, he is able to **communicate these ideas clearly** and effectively.

Andrew is at the cutting edge of research on *support variety theory*. By engrossing himself in this mathematical research, he develops skills that allow him to **learn and apply** technical disciplines with grace.

Andrew has educated many students through TAships, private tutoring, and serving as instructor of record. By teaching a broad array of courses, he has honed his communication skills. He is **comfortable explaining technical concepts** in both one-on-one settings and in a lecture setting.

Andrew is looking for a **data based summer internship** where he can use his technical skills to **do meaningful work**.

Education

University of Georgia — Athens, Georgia

Mathematics, Ph.D Candidate — *2014 – Present*

Advisor: Daniel K. Nakano. My research is on representation theory, with particular emphasis on the cohomology and support variety theory of Lie superalgebras. Additionally participated in research in tropical geometry and algebraic geometry, as well as projects in data science and statistics. Served as president and secretery for graduate student organization, logistic organizer for student algebraic geometry seminar, and logistic organizer for graduate visitation day.

University of Massachusetts — Amherst, Massachusetts

Mathematics, Bachelor of Science. Computer Science, Minor. — *2010 – 2014*

Advisor: Farshid Hajir. Exceptional amount of graduate coursework in real and complex analysis, algebra, geometry, and number theory. Multiple research projects in number theory and knot theory. Senior thesis elaborated on research paper by writing code to collect data concerning a family of polynomials which was in turn used to prove an original result.

Skills

- **Software:** *Operating Systems:* Windows, GNU/Linux, Mac OS. *Scripting:* Bash, Perl. *General Programming:* Python, Java. *Mathematical Programming:*
- **Teaching:** Fundamental understanding of basic notions, highly effective communication, very pointed and specific feedback,
- **Research:** Expertise in the mathematical discipline of support varieties. Able to read technical papers and ask meaningful questions. Mathematical software is a cornerstone of his research.

Experience

- **Teaching:** *Instructor of record:* Precalculus, Upward Bound SAT Review. *Teaching Assistant:* Linear algebra, Introduction to proofs, Differential calclulus, Integral calculus, Foundations of geometry.
- **Primary organizer:** President of our *Chapter of the American Mathematical Society* (2015 – present), Principal organizer of *P.E.N.U.L.T.I.M.A.T.E.* seminar (2016 – present).
- **Logistic Assistance:** Tuesday algebraic geometry seminar (2014), Graduate student visitation day (2015, 2016), Summer workshop in Algebraic Geometry (2016), Topological Aspects of Algebra and Arithmetic Geometry (2016).
- **Presentations:** Many presentations on mathematical disciplines such as cryptography, coding theory, theory of computation, support varieties for Lie superalgebras, and geometric complexity theory. Professional website building in Wordpress.