

# Anastasiia Minenkova

## Curriculum Vitae

Clapp 417  
Department of Mathematics and Statistics  
Mount Holyoke College  
✉ aminenkova@mtholyoke.edu

### Education

- 2022 **PhD in Applied Mathematics**, *University of Connecticut*, Storrs, CT, USA.
- 2021 **Graduate Certificate in College Instruction student**, *University of Connecticut*, Storrs, CT, USA.
- 2016 **Master of Science in Mathematics**, *University of Mississippi*, Oxford, MS, USA, *GPA=4.0*.
- 2007 **Magister's Degree in Mathematics**, *Donetsk National University*, Donetsk, Ukraine, (*with honors*).
- 2006 **Bachelor's Degree in Mathematics**, *Donetsk National University*, Donetsk, Ukraine, (*with honors*).

### Employment

- 2022 – present **Visiting Lecturer**, *Department of Mathematics and Statistics*, Mount Holyoke College, South Hadley, MA.
- 2020 – 2022 **Graduate Assistant**, *Q Center*, University of Connecticut, Storrs, CT.  
I organized workshops for tutors, reviews for students, was involved in the hiring process: interviewed potential tutors.
- 2015 **Tutor/Deskworker**, *Mathematics Lab*, University of Mississippi, Oxford, MS.  
I tutored for Elementary Statistics, Trigonometry, College Algebra), Precalculus, Business calculus, Calculus I–IV, Foundations of Mathematics, Differential equations; proctored exams

### Publications

11. **Gohberg-Kaashoek Numbers and Forward Stability of the Schur Canonical Form**, with Evelyn Nitch-Griffin and Vadim Olshevsky, 2021, [arXiv:2110.15334](#).
10. **Backward Stability of the Schur Canonical Form**, with Evelyn Nitch-Griffin and Vadim Olshevsky, 2021, [arXiv:2108.02312](#).
9. **A theorem of Joseph-Alfred Serret and its relation to perfect quantum state transfer**, with Maxim Derevyagin and Nathan Sun, *Expositiones Mathematicae*, **39**, Issue 3, 2021, p. 480–499.
8. **Lipschitz stability of  $\gamma$ -FOCS and RC canonical Jordan bases of real  $H$ -selfadjoint matrices under small perturbations**, with Sahinde Dogruer and Vadim Olshevsky, 2019, [arXiv:2204.04639](#).
7. **Existence of  $\gamma$ -FOCS for real  $H$ -selfadjoint matrices**, with Sahinde Dogruer and Vadim Olshevsky, 2019, accepted in "Linear and Multilinear Algebra".
6. **Integral identities for polyanalytic functions**, with Olga D. Trofimenko, in: Abell M., Jacob E., Stokolos A., Taylor S., Tikhonov S., Zhu J. (eds), *Appl. and Numerical Harm. Analysis*, Birkhäuser, Cham, 2019, p. 279–291.
5. **A continuation of solutions to convolution equations with the loss of smoothness**, *Lobachevskii Journal of Mathematics*, **38**, Issue 3, 2017, p. 488–493.
4. **The nonintegrability of an extension of solutions to the convolution equation from Gevrey class**, *Transactions of Institute of Applied Mathematics and Mechanics*, 2009, **19**, p. 143–147 (in Ukrainian).
3. **Theorems about non-integrability of an extension of solutions to the convolution equation**, *Bulletin of Donetsk National University – S. A. Natural sciences*, 2009, **1**, p. 21–24 (in Ukrainian).
2. **On the character of nonintegrability for an extension of solutions of convolution equations**, *Transactions of Institute of Applied Mathematics and Mechanics*, 2008, **18**, p. 152–155 (in Russian).
1. **The behavior of integral of an extension of solution to convolution equation**, *Transactions of Institute of Applied Mathematics and Mechanics*, 2008, **17**, p. 144–147 (in Russian).

### Conferences/Workshops organized

- May 12, 2022 **A Celebration for Women in Mathematics**, *UConn satellite event*.
- March 2022 **The SIAM Quantum Computing Workshop**, *UConn*.
- Fall 2021 **Seminar Series on Cross-racial/gender/cultural mentoring**: co-organized with Mihai Fulger and Veronique Bazzier-Matte, *University of Connecticut*, Storrs, CT.
- October 2021 **Mathematics Continued Conference**: co-organized with Corrie Ingall and Kim Savinon, *UConn*.
- October 2020 **Mathematics Continued Conference**: co-organized with Alyssa Genshaw and Lisa Naples, *UConn*.

- April 2018 **The SIAM Computer Software Workshop II**, *UConn*.  
January 2018 **The SIAM Computer Software Workshop for graduate students**, *UConn*.

## Teaching Experience

### VISITING LECTURER

**Mount Holyoke College**  
Fall 2022–now

- Math 102 (Calculus II) and Math 203 (Calculus III) as **primary instructor**

### TEACHING ASSISTANT

**University of Connecticut**  
Fall 2017–present

- Math 1131Q (Calculus I), Math 1132Q (Calculus II), Math 2110Q (Multivariable Calculus) as **teaching assistant**
- Math 2110Q (Multivariable Calculus) as **teaching assistant** for *online class*
- Math 2210Q (Applied Linear Algebra) as **primary instructor**
- Math 1030Q (Elementary Discrete Mathematics) as **primary instructor** for UConn SSS Summer program at the UConn which is a five week intensive summer program to prepare under-represented or first generation student populations for college and to provide tools for success in their careers and leadership positions. My role was to teach these students fundamental mathematics.

### GRADUATE STUDENT INSTRUCTOR

**University of Mississippi**  
Fall 2015–Spring 2022

- Math 125 (Precalculus) and Math 261 (Calculus I) as **primary instructor**

## Grants and Awards

- 2022 Conference Participation Award, UConn
- 2021 AWM and AMS Graduate Student Travel Grants for 2022 JMM.
- 2021 *Doctoral Fellowship*, Graduate School, UConn.
- 2021 *Louis J. DeLuca Memorial Award* to acknowledge the impressive teaching accomplishments, UConn.
- 2020 *Virtual Grad Student Travel Grant* for attendance at the Joint Mathematics Meetings, AMS.
- 2020 *Predoctoral Fellowship for Spring 2021*, Department of Mathematics and Graduate School, UConn.
- 2020 *Connie Strange Community Award*, Department of Mathematics, UConn.
- 2020 *Graduate Student Travel Grant* to Spring 2020 AMS Sectional meetings. (*the meeting was canceled*)
- 2019 *The Edward Victor Gant Scholarship*, the scholarship is granted on the basis of academic excellence, professional potential, dedicated service, and exemplary integrity.
- 2018, 2019 *The Provost letters* commending for excellence in teaching, *University of Connecticut*.
- 2018 As the president of the University of Connecticut's AMS Graduate Student Chapter I secured the funding of \$845 for our chapter and organized a talk given by Dr. Emma Previato (Boston University).
- 2017 Travel grant for participation in International Conference in Approximation Theory.  
*Honor Societies* – Phi Kappa Phi, Golden Key nominee, Gamma Beta Phi nominee (University of Mississippi)

## Contributed Talks

### Upcoming:

- 2022 **Quantum Computing Workshop at UConn**, *April, 2023*, invited talk.

### Past:

- 2022 **Joint Mathematical Meetings**, *April, 2022*, virtual.
- 2022 **Spring Eastern Sectional Meeting, Special Session on Quantum Probability, Orthogonal Polynomials, and Special Functions (invited speaker)**, *virtual*.
- 2021 **Analysis learning seminar, 3 December 2021**, *UConn, Storrs, CT*.
- 2020 **Sparse Days Meeting, 23-24 November 2020**, *Virtual Workshop, Cerfacs, Toulouse, France*.
- 2019 **4th Annual North Eastern Analysis Meeting**, *Syracuse University, Syracuse, NY*.
- 2019 **Spring Eastern Sectional Meeting, Special Session on Recent Advances in Structured Matrices and Their Applications (invited speaker)**, "**Lipschitz stability of certain canonical Jordan bases of real H-selfadjoint matrices under small perturbations**", *UConn, Hartford, CT*.
- 2019 **44 Annual NY State Regional Graduate Mathematics Conference**, *Syracuse University, Syracuse, NY*.
- 2019 **UConn Math Club expository talk titled "Calculus of Finite Differences"**(invited speaker), *UConn*.
- 2018 **UConn Math Club expository talk titled "Acceleration of Series Convergence"**(invited speaker), *University of Connecticut, Storrs, CT*.

## Recent meetings

- Quantum Numerical Linear Algebra, IPAM, January 24–27, 2022 (virtual).
- Blackwell Tapia Conference 2021, November 18-20, 2021. (*poster presentation*)
- 2021 ICERM Public Lecture: "More data, more problems – Double-dipping in statistics" by Daniela Witten.
- Jumpstart Virtual Conference on Racial Justice, Teaching, Leading, and Curriculum, July 28, 2021, hosted by the Initiative for Race Research and Justice, Vanderbilt University's Peabody College.
- MSRI Summer School "Mathematics of Big Data: Sketching and (Multi-)Linear Algebra", Summer 2021.
- Joint Mathematical Meetings, January 6–9, 2021, *Virtual Conference*.
- Mathematics Continued Conference, *University of Connecticut*, 2019, 2020, Storrs, CT
- The 2019 Northeast Analysis Network Conference, University of Connecticut, Storrs, CT
- The 40th International Conference on Quantum Probability and Infinite Dimensional Analysis, *Ohio State University* August 12–16, 2019, Columbus, OH
- Geometric and Harmonic Analysis, *University of Connecticut*, March 29–31, 2019, Storrs, CT
- Joint Mathematical Meetings, January 16–19, 2019, Baltimore, MD
- Women in Mathematics and Statistics Conference (WIMS), *Harvard University*, April 7, 2018, Cambridge, MA
- Women In Mathematics In New England, *Smith College*, September 16, 2017, Northampton, MA
- International Conference in Approx. Theory, *Georgia Southern University*, May 8–11, 2017, Savannah, GA

## Synergistic Activities - Mathematics Community:

- Fall 2021 **Tutor-Volunteer**, Women in Math, Science, Engineering Learning Community, UConn
- 2021,2022 **Panelist**, Being and Giving-back as a Woman in STEM, WiMSE Sophomore Class Panel, UConn
- 2020–present **Vice-President**, as of 2021 **President** of AWM Graduate Student Chapter, UConn
- Fall 2020 **Mentor**, Directed Reading Program with *Gregory Aschenbrenner*, UConn
- 2019 **Mathematics Continued Conference**: Panel on Applying to Grad School in Mathematics (invited panelist).
- 2019–present **New TA Orientation**, UConn
- I have volunteered to help with the orientation for new teaching assistants in the mathematics department. I facilitate small group discussion about lesson planning, time management, and teaching strategies, as well as responding to questions during the large group meetings. I also critique mini-lessons prepared and taught by the students in groups.*
- 2019 **Member of Data Collection Committee** for [Notable Women in Mathematics Project](#), AWM
- Spring 2019 **Mentor**, Directed Reading Program with *Xiaoran (Rachel) Tan*, UConn
- 2019 **Volunteer**, MATHCOUNTS Competition, UConn
- 2018–2019 **President** of AMS Graduate Student Chapter, UConn
- I hosted Prof. Emma Previato (Boston University) who gave a talk at the SIGMA seminar.*
- 2018–present **TA Mentor**, TA Network Program, UConn
- 2017–2018 **Vice-President** and **Co-founder** of AMS Graduate Student Chapter, UConn
- 2017–2020 **Treasurer**, **Webmaster** and **Co-founder** of SIAM Graduate Chapter, UConn
- I hosted Prof. Breno Fragomeni (UConn Animal Science department), Prof. Donald Sheehy (UConn Computer Science department), and Prof. Misha Kilmer (Tufts University) who gave a talk at the SIGMA seminar.*
- 2018 The first and second annual Integration Bee for undergradute students at UConn, *organizer*
- 2016–2017 **President** of AMS Graduate Student Chapter, University of Mississippi  
**AMS, AWM, SIAM member**

## Professional Activities

- Data Analysis Project* I worked on a project with UConn Health Center for Quantative Medicine and the Jackson Laboratory for Genomic Medicine. It dealt with medical data analysis using t-sne and diffussion maps techniques utilizing R programming.
- Referee for *SIAM Review*, *Journal of Difference Equations and Applications*, *Linear and Multilinear Algebra*.
- Reviewer for *Mathematical Reviews*.

## Editorial Experience

- 2011–2013 **Assistant editor**, *Versita de Gruyter*, book publishing program in Mathematics.

## Computer skills

LaTeX, MATLAB, Maple, Mathematica, R, OpenOffice, Microsoft Office, BlackBoard, Pearson MyMathLab, Cengage WebAssign, Piazza