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Houssein El Turkey

Education

- 2008–2014 **Ph.D., Mathematics**, *University of Oklahoma*, OK, USA
Dissertation: *Complexity of Modules over Lie Superalgebras*. Advisor: Prof. J. Kujawa.
- 2006–2008 **M.S., Mathematics**, *The American University of Beirut*, Beirut, Lebanon
Thesis: *Generalizations of Boolean Rings*. Advisor: Prof. H. Abu Khuzam
- 2002–2006 **B.S., Mathematics**, *Beirut Arab University*, Beirut, Lebanon
Undergraduate Thesis: *El-Gamal Cryptosystems*. Advisor: Prof. A. Kassar

Academic Positions

- 2024–Present **Professor, Mathematics**, *University of New Haven*, CT, USA
- 2023–Present **Director, Center for Teaching Excellence (CTE)**, *University of New Haven*, CT, USA
- 2020–2024 **Associate Professor, Mathematics**, *University of New Haven*, CT, USA
- 2021–2022 **Faculty Fellow at the Center for Teaching Excellence**, *University of New Haven*, CT, USA
- 2021 **Calculus Consultant**, *outlier.org*, USA
- 2017–2021 **Mathematics Coordinator**, *University of New Haven*, CT, USA
- 2014–2020 **Assistant Professor, Mathematics**, *University of New Haven*, CT, USA
- 2008–2014 **Graduate Teaching Assistant, Mathematics**, *University of Oklahoma*, OK, USA
- 2006–2008 **Graduate Assistant, Mathematics**, *The American University of Beirut*, Lebanon

Teaching Experience

Courses Taught

2014–Present **University of New Haven**

- Quantitative Reasoning (S15, SUII18)
- Business Calculus (F15)
- Calculus I (SUI15, 2 sections in F16, SUI17, 3 sections in F17, SUII18, 2 sections in F18 including Honors section, 2 sections in F19 including Honors section)
- Calculus II (2 sections in F14, S15, substituted for 2 sections in F15, 2 sections in S16, Honors section in S19)
- Calculus III (F15, SU-II 16, 2 sections in S17, SU-II 20, 2 sections in F20, SU-II21, F21, S22, SU-I22, F22, Winter23, SU-I23, SU-II23, F23, Winter24, SU-II24, F24)
- Foundations of Mathematics (S18, S19, S25)
- Discrete Mathematics for Computing (2 sections in S21, F21, F22)
- Introduction to Number Theory (F16, F23)
- Linear Algebra (F17)
- Modern Algebra (F15; Independent Study with 3 students in S16; Independent Study with one student in S17)
- Linear Algebra II (F20)

- Topics Course: Cryptography (Independent Study with one student in SUI17)
- Department Seminar (F15)
- Independent Study (1 cr./1 student in F15, S16, F16; 1 cr./2 students SUI16; 1 cr./2 students in F17; 2 cr./2 students in S18; 1 cr./1 student in F18, S19; 1 cr./2 students in F19; 2 cr. /1 student in S20; 1 cr./1 student in F20; 2 cr./1 student in S21)

2008–2014 **University of Oklahoma**

- College Algebra (F10)
- Pre-Calculus and Trigonometry (F13, Substitute Lecturer for 2 months)
- Pre-Calculus For Business, Life and Social Sciences (S12, S13)
- Calculus and Analytic Geometry I (SU12, Recitation Section in F09)
- Calculus and Analytic Geometry II (SU10, SU11, SU13, Recitation Sections in S10, F11, F12, F13)

Research Interests

Undergraduate Mathematics Education; Undergraduate Mathematics Research; Representation Theory of Lie Superalgebras; Combinatorics.

Mentored Student Research

2014–
Present **University of New Haven**

- Doctoral Thesis Committee Chair, with Jeffrey Shuman (F23–F24): Exploring Allied Health Professionals Readiness to Transition into Educators at the Associate Degree Level
- Honors Thesis Co-advisor, with Elizabeth Sirett (S22): Inclusion at College Campuses
- Undergraduate Research, with Nathan Waskiewicz (F18–S19); Spencer Hopwood (F19); Hurian Semeghini (S19): Rainbow Number of Linear Equations
- Undergraduate Research, with Alec Shackett and Andrew Svitlik (F17–S18): Frobenius Number of Numerical Semigroups
- Undergraduate Research, with Cassandra Pray (F15–S17): Covering Number of Finite Rings

Publications

The publications in pure mathematics have equal contributions. Authorship of education research articles is ordered by level of contribution.

Published Book Chapters

- Savic, M., Satyam, V.R., **El Turkey, H.**, Karakok, G., & Tang, G. (2022). Mathematical Creativity at the Tertiary Level: A Systematic Review of the Literature. In S. Chamberlin, P. Liljedahl & M. Savic (Eds.), *Mathematical Creativity: A Developmental Perspective* (pp. 105–120). New York, NY: Springer.
- Karakok, G., Tang, G., Cilli-Turner, E., **El Turkey, H.**, Savic, M., & Satyam, V.R. (2022). “Creativity is Contagious” and “Collective”: Progressions of Undergraduate Students’ Perspectives on Mathematical Creativity. In S. Chamberlin, P. Liljedahl, & M. Savic (Eds.), *Mathematical Creativity: A Developmental Perspective* (pp. 197–216). New York, NY: Springer.
- Savic, M., Karakok, G., Tang, G., **El Turkey, H.**, & Naccaratto, E. (2017). Formative Assessment of Creativity in Undergraduate Mathematics: Using a Creativity-in-Progress Rubric (CPR) on Proving. An invited book chapter to R. Leiken & B. Sriraman (Eds.). *Mathematical Creativity and Giftedness, Interdisciplinary Perspectives from Mathematics and Beyond, Springer International Publishing AG*, 23–46.

Peer-Reviewed Journal Articles

- **El Turkey, H.** (2024). A Fock Space Approach to Socle Series of Grothendieck Group over Lie Superalgebra $\text{osp}(2|2)$. *Communications in Algebra*. <https://doi.org/10.1080/00927872.2024.2373380>
- **El Turkey, H.**, Karakok, G., Cilli-Turner, E., Tang, G., Savic, M., & Satyam, V.R. (2024). A Framework to Design Creativity-Fostering Mathematical Tasks. *International Journal of Science and Mathematics Education*. <https://doi.org/10.1007/s10763-024-10449-3>
- **El Turkey, H.**, Kottegoda, Y., & Siriwardena, L. (2023). Design Principles of Inquiry-Oriented Tasks in Integral Calculus. *International Journal of Mathematical Education in Science and Technology*, 54:9, 1804–1818. <https://doi.org/10.1080/0020739X.2023.2257699>
- **El Turkey, H.** and Waskiecwiz, N. (2023). On Rainbow Numbers of \mathbb{Z}_n for $x_1 + x_2 = 4x_3$. *Missouri Journal of Mathematical Sciences*, Vol. 35, No. 1, 117–122.
- Cilli-Turner, E., Satyam, V.R., Savic, M., Tang, G., **El Turkey, H.**, & Karakok, G. (2023). Broadening Views of Mathematical Creativity: Inclusion of the Undergraduate Student Perspective. *Journal of Creativity*, Volume 33, Issue 1. <https://doi.org/10.1016/j.yjoc.2022.100036>
- Satyam, R., Savić, M., Cilli-Turner, E., **El Turkey, H.**, & Karakok, G. (2022). Exploring the Role of Students' Views of Creativity on Feeling Creative. *International Journal of Mathematical Education in Science and Technology*, 53:1, 151–164. <https://doi.org/10.1080/0020739X.2021.1961032>
- **El Turkey, H.**, Turki, S., & Kottegoda, Y. (2021). Two Implementations of Pre-class Readings in Calculus Courses. *PRIMUS: Problems, Resources, and Issues in Mathematics Undergraduate Studies*, 31:2, 210–222. <https://doi.org/10.1080/10511970.2019.1666331>.
- Ansaldi, K., **El Turkey, H.**, Hamm, J., Nu'Man, A., Warnberg, N., & Young, M. (2020). Rainbow Numbers of \mathbb{Z}_n for $a_1x_1 + a_2x_2 + a_3x_3 = b$. *Integers*, Volume 20, A51.
- **El Turkey, H.**, Shackett, A., & Svitlik, A. (2020). Exploring Bounds for the Frobenius Number. *Mathematics Exchange*, Volume 14, no.1, 1–8.
- **El Turkey, H.** (2018). Complexity of Simple Modules over Lie Superalgebra $\text{osp}(k|2)$. *Journal of Pure and Applied Algebra*, **222**(1), 181–190.
- Omar, M., Karakok, G., Savic, M., **El Turkey, H.**, & Tang, G. (2019). “I Felt Like a Mathematician”: Homework Problems to Promote Creative Effort and Metacognition. *PRIMUS: Problems, Resources, and Issues in Mathematics Undergraduate Studies*, 29:1, 82–102. <https://doi.org/10.1080/10511970.2018.1475435>.
- **El Turkey, H.**, Tang, G., Savic, M., Karakok, G., & Cilli-Turner, E. (2018). The Creativity-in-Progress Rubric (CPR) on Proving: Two Teaching Implementations and Students' Reported Usage. *PRIMUS: Problems, Resources, and Issues in Mathematics Undergraduate Studies*, 28:1, 57–79. <http://dx.doi.org/10.1080/10511970.2017.1346735>.
- Tang, G., **El Turkey, H.**, Cilli-Turner, E., Savic, M., Karakok, G., & Plaxco, D. (2017). Inquiry as an Entry Point to Equity in the Classroom, *International Journal of Mathematical Education in Science and Technology*, 48:1, S4–S15. <https://doi.org/10.1080/0020739X.2017.1352045>
- Liu, D. and **El Turkey, H.** (2017). Exploration of Task Performance Tests in Physics Laboratory. *European Journal of Physics*, **38**(6), 065701 (9pp).
- **El Turkey, H.** and Pray, C. (2017). A Note on the Covering Number of Some Finite Rings. *Minnesota Journal of Undergraduate Mathematics*, **2**(1). <https://mjum.math.umn.edu/index.php/mjum/article/view/41>.
- **El Turkey, H.** (2016). Complexity of Modules over Lie Superalgebras. *Journal of Algebra*, **445**, 365–393.

- **El Turkey, H.** and Kujawa, J. (2013). Presenting Schur Superalgebras. *Pacific Journal of Mathematics*, **262**(2), 285–316.

Refereed Conference Proceedings

- **El Turkey, H.** & Crawford, R. (Accepted). Reflections on Creativity and Affect as a Vehicle for Writing in a Mathematics Course. *Proceedings of the 27th Annual Conference on Research in Undergraduate Mathematics Education*. Alexandria, VA.
- **El Turkey, H.**, Cilli-Turner, E., Savic, M., Satyam, V.R. (2024). Exploring Conceptions of Mathematical Creativity: Calculus Instructors' Views. *Proceedings of the 2024 INDRUM Conference*. Barcelona, Spain.
- Karakok, G., **El Turkey, H.**, Savic, M., Satyam, V.R., Cilli-Turner, E., & Tang, G. (2023). Zone Theory Exploration of Teaching to Foster Mathematical Creativity in a Coordinated Calculus. In S. Cook, B. Katz, & D. Moore-Russo (Eds.). *Proceedings of the 25th Annual Conference on Research in Undergraduate Mathematics Education* (pp. 999–1005). Omaha, NE.
- **El Turkey, H.**, Karakok, G., Cilli-Turner, E., Tang, G., Savic, M., & Satyam, V.R. (2022). Creativity-Fostering Task Design Framework. In S.A. Chamberlin (Editor). *Proceedings of the 12th International Conference on Mathematical Creativity and Giftedness* (pp. 149–155). Las Vegas, NV. <https://d-nb.info/1268386723/34>
- Satyam, V.R., Savic, M., Tang, G., **El Turkey, H.**, & Karakok, G. (2022). Teacher Actions to Foster Creativity in Calculus. In S. Karunakaran, & A. Higgins (Eds.). *Proceedings of the 24th Annual Conference on Research in Undergraduate Mathematics Education* (pp. 536–544). Boston, MA. <http://sigmaa.maa.org/rume/RUME24.pdf>
- Tang, G., Savic, M., Satyam, V.R., **El Turkey, H.**, & Karakok, G. (2022). “The reason why I didn’t like [math] before is because I never felt creative”: Affective Outcomes from Teaching Actions to Foster Mathematical Creativity in Calculus 1. In S. Karunakaran, & A. Higgins (Eds.). *Proceedings of the 24th Annual Conference on Research in Undergraduate Mathematics Education* (pp. 630–638). Boston, MA. <http://sigmaa.maa.org/rume/RUME24.pdf>
- Karakok, G., **El Turkey, H.**, Savic, M., Tang, G., Cilli-Turner, E. & Regier, P. (2020). Creativity-in-Progress Rubric on Problem Solving at the Post-secondary Level. In A.I. Sacristán, J.C. Cortés-Zavala, & P.M. Ruiz-Arias (Eds.). *Proceedings of the 42nd Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (pp. 986–990). Mexico. <https://doi.org/10.51272/pmena.42.2020>
- Cilli-Turner, E., Savic, M., Tang, G., **El Turkey, H.**, & Karakok, G. (2020). Sources of Evolution of University Students' Views on Mathematical Creativity. In A.I. Sacristán, J.C. Cortés-Zavala, & P.M. Ruiz-Arias (Eds.). *Proceedings of the 42nd Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (pp. 1069–1073). Mexico. <https://doi.org/10.51272/pmena.42.2020>
- **El Turkey, H.**, Karakok, G., Tang, G., Regier, P., Savic, M., & Cilli-Turner, E. (2020). Tasks to Foster Mathematical Creativity in Calculus I. In S. Karunakaran, C. Rasmussen, J. Rabin, M. Wawro, & S. Brown (Eds.). *Proceedings of the 23rd Annual Conference on Research in Undergraduate Mathematics Education* (pp. 579–588). Boston, MA. <http://sigmaa.maa.org/rume/RUME23.pdf>
- Tang, G., Savic, M., , Regier, P., & Cilli-Turner, E., Karakok, G., & **El Turkey, H.** (2020). Shifting Pedagogical Beliefs into Action through Teaching for Mathematical Creativity. In S. Karunakaran, C. Rasmussen, J. Rabin, M. Wawro, & S. Brown (Eds.). *Proceedings of the 23rd Annual Conference on Research in Undergraduate Mathematics Education* (pp. 959–965). Boston, MA. <http://sigmaa.maa.org/rume/RUME23.pdf>

- Cilli-Turner, E., , Savic, M., Karakok, G., **El Turkey, H.**, & Tang, G. (2019). Tertiary Students' Ever-changing Views on Mathematical Creativity. In J. Pettigrew, L. Rylands, D. Shearman, & A. Yeung (Eds.). *Proceedings of the 12th Delta Conference on the Teaching and Learning of Undergraduate Mathematics and Statistics* (pp. 11–18). Fremantle, Australia. http://swandelta.org/assets/documents/2019_Swan_Delta_Proceedings.pdf
- Cilli-Turner, E., Savic, M., **El Turkey, H.**, & Karakok, G. (2019). An Initial Investigation into Teacher Actions that Specifically Foster Mathematical Creativity. In M. Nolte (Eds.). *Proceedings of the 11th International Conference on Mathematical Creativity and Giftedness* (pp. 130–135). Hamburg, Germany. http://wtm-verlag.de/OA_Download/Nolte_Ed_Including_the_Highly_Gifted_ISBN9783959871327.pdf
- Savic, M., **El Turkey, H.**, Tang, G., Karakok, G., Cilli-Turner, E., Plaxco, D., & Omar, M. (2017). Pedagogical practices that foster mathematical creativity at tertiary-level proof-based courses. In D. Pitta–Pantazi (Eds.). *Proceedings of the 10th International Conference on Mathematical Creativity and Giftedness* (pp. 130–135). Nicosia, Cyprus. http://www.cyprusconferences.org/mcg10/files/Proceedings_MCG10_FinalPublication.pdf
- Turki, S. and **El Turkey, H.** (2017). Implementation of Pre and Post Class Readings in Calculus. In A. Weinberg, C. Rasmussen, J. Rabin, M. Wawro, S. Brown (Eds.). *Proceedings of the 20th Annual Conference on Research in Undergraduate Mathematics Education* (pp. 1469–1474). San Diego, CA. <http://sigmaa.maa.org/rume/RUME20.pdf>
- Savic, M., Plaxco, D., Wenger, M., Cilli-Turner, E., Tang, G., **El Turkey, H.**, & Karakok, G. (2017). C×N: Investigating the creative proving process using neuroscience methods. In A. Weinberg, C. Rasmussen, J. Rabin, M. Wawro, S. Brown (Eds.). *Proceedings of the 20th Annual Conference on Research in Undergraduate Mathematics Education* (pp. 879–885). San Diego, CA. <http://sigmaa.maa.org/rume/RUME20.pdf>
- Tang, G., **El Turkey, H.**, Cilli-Turner, E., Savic, M., Karakok, G., & Plaxco, D. (2017). Inquiry as an access point to equity in the classroom. In: A. Weinberg, C. Rasmussen, J. Rabin, M. Wawro, S. Brown (Eds.). *Proceedings of the 20th Annual Conference on Research in Undergraduate Mathematics Education* (pp. 1098–1106). San Diego, CA. <http://sigmaa.maa.org/rume/RUME20.pdf>
- Savic, M., **El Turkey, H.**, Tang, G., Karakok, G., Cilli-Turner, E., Plaxco, D., & Omar, M. (2017). Pedagogical practices for fostering mathematical creativity in proof-based courses: Three case studies. In: A. Weinberg, C. Rasmussen, J. Rabin, M. Wawro, S. Brown (Eds.). *Proceedings of the 20th Annual Conference on Research in Undergraduate Mathematics Education* (pp. 1418–1424). San Diego, CA. <http://sigmaa.maa.org/rume/RUME20.pdf>
- Karakok, G., Savic, M., Tang, G., & **El Turkey, H.** (2015). Mathematicians' Views on Undergraduate Students' Creativity. In: K. Krainer, N. Vondrova (Eds.). *Proceedings of the 9th Congress of the European Society for Research in Mathematics Education* (pp. 1003–1009). Prague, Czech Republic.
- Tang, G., **El Turkey, H.**, Savic, M., & Karakok, G. (2015). Exploration of Undergraduate Students' and Mathematicians' Perspectives on Creativity. In T. Fukawa-Connelly, N.E. Infante, K. Keene, M. Zandieh (Eds.). *Proceedings of the 18th Annual Conference on Research in Undergraduate Mathematics Education* (pp. 1008–1015). Pittsburgh, PA, . <http://sigmaa.maa.org/rume/RUME18-final.pdf>
- Savic, M., Karakok, G., Tang, G., & **El Turkey, H.** (2015). Developing a Creativity-in-Progress Rubric on Proving. In T. Fukawa-Connelly, N.E. Infante, K. Keene, M. Zandieh (Eds.). *Proceedings of the 18th Annual Conference on Research in Undergraduate Mathematics Education* (pp. 954–960). Pittsburgh, PA. <http://sigmaa.maa.org/rume/RUME18-final.pdf>

- Savic, M., Karakok, G., Tang, G., **El Turkey, H.** & Stubblefield, M. (2015). How Can We Assess Undergraduate Students' Creativity in Proof and Proving? *Proceedings of the 8th Annual Conference of Mathematical Creativity and Giftedness, International Group for Mathematical Creativity and Giftedness* (pp. 107–111). Denver, CO, . <https://drive.google.com/file/d/0B1W-oFlzfvobU5Ma0g5RjZPRWc/view>

Work in Progress

- Tang, G., Satyam, V.R., Savic, M., **El Turkey, H.**, Cilli-Turner, E., & Karakok, G. Teaching Actions and Affective Outcomes from Fostering Creativity in Calculus 1.
- **El Turkey, H.** Fostering Students' Mathematical Creativity in Multi-variable Calculus.
- **El Turkey, H.** & Crawford, R. Transforming a Mathematics Course into Writing-Intensive Course.
- Tang, G., Karakok, G., Savic, M., **El Turkey, H.**, & Cilli-Turner, E. Exploration of Calculus Students' Mathematical Creativity and Identities Using their Autobiographies.

Non Peer-Reviewed Articles

- Tang, G., Cilli-Turner, E., Savic, M., **El Turkey, H.**, Omar, M., & Karakok, G. (2019). Reflections on Teaching for Mathematical Creativity. *AMS Blogs*. <https://blogs.ams.org/matheducation/2019/01/15/reflections-on-teaching-for-mathematical-creativity/>
- Karakok, G., Savic, M., Tang, G., **El Turkey, H.**, Plaxco, D., & Naccarato, E. (2016). Creativity-in-Progress Rubric (CPR) on Proving: A Formative Assessment Tool for Proof-Based Courses. *MAA FOCUS*, **36**(1), February–March Issue of 2016.

Other

- Karakok, G., **El Turkey, H.**, Savic, M., Tang, G., Naccarato, E., Plaxco, D. (2016). Creativity-in-Progress Rubric on Proving–Enhancing Student Creativity. A peer-reviewed paper for presentation at the *13th International Congress on Mathematical Education*, Hamburg, Germany. Note: ICME-13 DIDN'T DO PROCEEDINGS FOR ALL TOPICAL STUDY GROUPS.

Presenting & Facilitating Workshops & PD

- Fall 2024 **Reflections on teaching: First Week Experiences and Prior Successes**, *I co-facilitated a virtual CTE workshop with CTE faculty fellows; University of New Haven, Virtual, West Haven, CT*
- Spring 2024 **Roundtable Discussion on AI in the Classroom**, *I co-organized and co-facilitated a virtual CTE workshop with Cassandra Sedelmaier; University of New Haven, Virtual, West Haven, CT*
- Fall 2023 **Terminology in Teaching and Learning**, *I co-organized and co-presented a virtual CTE workshop with Cassandra Sedelmaier and Dr. Nikolas Stasulli; University of New Haven, Virtual, West Haven, CT*
- Fall 2022 **Towards Inclusive Teaching: Learning, Reflecting, and Creating an Inclusive Classroom**, *I organized and presented a series of 4 virtual CTE workshops; University of New Haven, Virtual, West Haven, CT*
- Mar 2022 **Advocating for Students of Color in Educational Settings**, *I organized and facilitated a virtual CTE Workshop presented by Dr. Pamela Harris, Williams College, and Dr. Aris Winger, Georgia Gwinnett College; University of New Haven, Virtual, West Haven, CT*
- Fall 2021 **An Introductory Guide to Scholarship of Teaching and Learning**, *I organized and co-presented a series of 2 virtual CTE workshops with Dr. Emilie Hancock from Central Washington University; University of New Haven, Virtual, West Haven, CT*

- Sep 2021 **Everyone is More Anxious: How to Support Students' Mental Health**, *I organized and facilitated a virtual CTE Workshop/Panel presented by Dr. Melissa Whitson (PSYC), Helena Cole (CSS), and Paige Bartels (CAPS); University of New Haven, Virtual, West Haven, CT*
- Nov 2020 **Designing Effective Online Quizzes/Exams**, *I co-presented a virtual CTE workshop with Dr. Amy Carlile from Biology Department; University of New Haven, Virtual, West Haven, CT*
- Fall 2021 **Professional Development for REACT Fellows**, *I co-organized and co-presented with Dr. Milos Savic (U. of Oklahoma) weekly virtual PD sessions with instructor participants in an NSF grant project, USA*

Selected Presentations

Invited Speaker

- Oct 2024 **What if Calculus 1 could be a Playground for Mathematical Creativity?**, *Intro Math Seminar; Harvard University, Joint presentation with V. R. Satyam, Cambridge, MA*
- Sep 2023 **Teaching Actions to Foster Mathematical Creativity**, *Math Education Seminar; Florida International University, Virtual, Miami, FL*
- Apr 2022 **Designing Calculus Tasks to Foster Creative Mathematical Thinking**, *Math Education Seminar; University of Oklahoma, Joint presentation with M. Savic, Virtual, Norman, OK*
- Mar 2022 **Designing Calculus Tasks to Foster Creative Mathematical Thinking**, *Math Education Seminar; University of Kentucky, Joint presentation with M. Savic, Virtual, Lexington, KY*
- Mar 2020 **Fostering Creativity in the Calculus Classroom**, *Mathematics Colloquium; Western New England University, Springfield, MA*
- Apr 2019 **Complexity of Modules over Various Lie Superalgebras**, *American Mathematical Society (AMS) Eastern Sectional Meeting; University of Connecticut, Hartford, CT*
- Apr 2018 **Exploring Intersections of Teaching for Creativity, Equity, and Inquiry Instruction**, *Mathematics Teaching Seminar; University of Connecticut, Storrs, CT*
- Sep 2017 **Complexity and z -complexity over Lie Superalgebra $\mathfrak{osp}(k|2)$** , *American Mathematical Society (AMS) Southeastern Sectional Meeting; University of Central Florida, Orlando, FL*
- Apr 2017 **Can you buy 43 Chicken McNuggets?**, *2017 PME Induction and Mathematics Awards Ceremony, The Rhode Island Beta Chapter of Pi Mu Epsilon; Rhode Island College, North Providence, RI*
- Apr 2016 **Explicitly Valuing Mathematical Creativity in Proof-Based Courses**, *Mathematics Education Seminar; University of Connecticut, Storrs, CT*
- Sep 2014 **Complexity and z -complexity over Lie Superalgebras**, *AMS Central Sectional Meeting; University of Wisconsin–Eau Claire, Eau Claire, WI*

Presenter

- Oct 2024 **How does Mathematical Creativity Relate to Confidence/Comfort? Instructors' and Students' Reports from Calculus 1**, *Eighth Northeastern Conference on Research in Undergraduate Mathematics Education-Boston University, Joint presentation with V. R. Satyam, Boston, MA*
- Jun 2024 **Exploring Conceptions of Mathematical Creativity: Calculus Instructors' Views**, *Fifth conference of the International Network for Didactic Research in University Mathematics-INDRUM 2024, Joint presentation with E. Cilli-Turner, Barcelona, Spain*

- Nov 2023 **Design Principles of Inquiry-Oriented Tasks in Integral Calculus**, *Virtual-The 14th Southern Hemisphere Conference on Teaching and Learning of Mathematics and Statistics (DELTA2023)*, Joint presentation with Y. Kottegoda, Cape Town, South Africa
- May 2023 **Calculus 1 Instructors' Conceptions of Mathematical Creativity from Three Perspectives: Research, Teaching, and Views on Students' Creativity**, *Virtual-Creativity Conference-Southern Oregon University*, Ashland, OR
- Apr 2023 **Creativity-Fostering Tasks in Calculus Courses**, *The 29th Annual Hudson River Undergraduate Conference-Mount Holyoke College*, South Hadley, MA
- Sep 2022 **Creativity-Fostering Task Design Framework**, *The 12th International Conference on Mathematical Creativity and Giftedness (MCG12)*, Joint presentation with G. Karakok, Las Vegas, NV
- Nov 2021 **Designing Calculus Tasks to Foster Creative Mathematical Thinking**, *Virtual-Fall MAA Northeastern Sectional Meeting*, USA
- Feb 2020 **Tasks that Foster Mathematical Creativity in Calculus I**, *The 23th Annual Conference on Research in Undergraduate Mathematics Education*, Boston, MA
- Jan 2020 **Tasks that Foster Mathematical Creativity in Calculus I**, *Joint Math Meetings*, Denver, CO
- Aug 2019 **An Initial Investigation into Teacher Actions that Specifically Foster Mathematical Creativity**, *The 11th International Mathematical Creativity and Giftedness Conference (MCG11)*, Joint presentation with E. Cilli-Turner and M. Savic, Hamburg, Germany
- Jan 2018 **Two Implementations of Pre-class Readings in Calculus**, *Joint Mathematics Meetings*, San Diego, CA
- Jan 2018 **Exploring the Intersection of Fostering Mathematical Creativity and Inquiry Teaching**, *Joint Mathematics Meetings*, Joint presentation with M. Savic, San Diego, CA
- Feb 2017 **Implementing Pre/Post Class Readings in Calculus**, *The 20th Annual Conference on Research in Undergraduate Mathematics Education*, San Diego, CA
- Feb 2017 **Pedagogical Practices for Fostering Mathematical Creativity in Proof-Based Courses: Three Case Studies**, *The 20th Conference on Research in Undergraduate Mathematics Education*, Joint presentation with M. Savic, G. Karakok, G. Tang, & M. Omar, San Diego, CA
- Aug 2016 **Implementation of Pre-class Readings in Calculus**, *Mathematical Association of America (MAA) MathFest*, OH, USA
- Jan 2016 **Addressing Creativity in an Introductory Proof Course**, *Joint Mathematics Meetings*, Joint presentation with M. Savic, Seattle, OR
- Aug 2015 **Discussing Mathematical Creativity at the Undergraduate Level**, *MAA MathFest*, Washington DC.
- Feb 2015 **Exploration of Undergraduate Students' and Mathematicians' Perspectives on Creativity**, *The 18th Annual Conference on Research in Undergraduate Mathematics Education*, Pittsburgh, PA
- Nov 2014 **A Research-Based Rubric to Assess Students' Creativity in Proof and Proving**, *MAA Northeastern Sectional Meeting; SCSU*, New Haven, CT
- Jun 2014 **Utilizing a Research-Based Rubric to Assess Students' Creativity in Proof and Proving**, *The 17th Annual Legacy of R.L. Moore IBL Conference*, Joint presentation with M. Savic, G. Karakok, G. Tang, & M. Stubblefield, Denver, CO
- May 2014 **Complexity of Modules over Lie superalgebras**, *Southeastern Lie Theory Workshop; University of Georgia*, Athens, GA
- Apr 2013 **Presenting Schur Superalgebras**, *The 3rd Graduate Research Conference in Algebra and Representation Theory; Kansas State University*, Manhattan, KS

- Mar 2013 **Complexity of the Simple and Kac Modules over $\mathfrak{osp}(2|2n)$** , *TORA IV : Texas - Oklahoma Representations and Automorphic Forms IV*; U. of North Texas, Dallas, TX
Co-authored Talks/* is Presenter
- Feb 2023 **Zone Theory Exploration of Teaching to Foster Mathematical Creativity in Coordinated Calculus**, *The 25th Annual Conference on Research in Undergraduate Mathematics Education*, G. Karakok*, H. El Turkey, M. Savic, V.R. Satyam, E. Cilli-Turner, & G. Tang, Omaha, NE
- May 2022 **Exploration of Calculus Students' Mathematical Creativity and Identities Using their Autobiographies**, *Creativity Conference-Southern Oregon University*, G. Karakok*, G. Tang*, M. Savic, H. El Turkey, & E. Cilli-Turner, Ashland, OR
- Feb 2022 **The reason why I didn't like [math] before is because I never felt creative: Affective Outcomes from Teaching Actions to Foster Mathematical Creativity in Calculus 1**, *The 24th Annual Conference on Research in Undergraduate Mathematics Education*, G. Tang*, M. Savic, V.R. Satyam, H. El Turkey, & G. Karakok, Boston, MA
- Feb 2022 **Teacher Actions to Foster Creativity in Calculus**, *The 24th Annual Conference on Research in Undergraduate Mathematics Education*, R. Satyam*, G. Tang, M. Savic, H. El Turkey, & G. Karakok, Boston, MA
- Feb 2020 **Shifting Pedagogical Beliefs into Action Through Teaching for Mathematical Creativity**, *The 23th Annual Conference on Research in Undergraduate Mathematics Education*, G. Tang*, M. Savic, E. Cilli-Turner, P. Regier, G. Karakok, & H. El Turkey, Boston, MA
- Jun 2019 **University Instructors' Pedagogical Changes as a Result of Focusing on Mathematical Creativity**, *The 2nd International Conference on Applications of Mathematics to Nonlinear Sciences (AMNS-2019)*, G. Tang*, M. Savic*, H. El Turkey, E. Cilli-Turner, & G. Karakok, Nepal
- Feb 2017 **Inquiry as an Access Point to Equity**, *The 20th Annual Conference on Research in Undergraduate Mathematics Education*, G. Tang*, H. El Turkey, E. Cilli-Turner, M. Savic, D. Plaxco, & G. Karakok, San Diego, CA
- Feb 2017 **$C \times N$ Investigating the Creative Proving Process Using Neuroscience Methods**, *The 20th Conference on Research in Undergraduate Mathematics Education*, M. Savic*, D. Plaxco*, M. Wenger, E. Cilli-Turner, G. Tang, H. El Turkey, & G. Karakok, San Diego, CA
- Nov 2016 **The Covering Number of Some Finite Rings**, *MAA Northeastern Sectional Meeting; Trinity College*, H. El Turkey and C. Pray*, Hartford, CT
- Nov 2016 **Implementation of Pre-class Readings in Calculus**, *MAA Northeastern Sectional Meeting; Trinity College*, S. Turki* and H. El Turkey, Hartford, CT
- Jul 2016 **Creativity-in-Progress Rubric on Proving-Enhancing Student Creativity**, *The 13th International Congress on Mathematical Education*, G. Karakok*, H. El Turkey, M. Savic, G. Tang, E. Naccarato, & D. Plaxco, Hamburg, Germany
- Nov 2015 **Using the Creativity-in-Progress Rubric in an Inquiry-Based Introductory Proof Course**, *The 10th Southern Hemisphere Conference on the Teaching and Learning of Undergraduate Mathematics and Statistics*, G. Tang*, G. Karakok*, M. Savic, H. El Turkey, E. Naccarato, & Brent Hancock, Port Elizabeth, South Africa
- Oct 2015 **Understanding the Proving Process with the Lens of Mathematical Creativity**, *AMS Western Sectional Meeting; California State University*, G. Karakok*, G. Tang, H. El Turkey, E. Naccarato, & D. Plaxco, Fullerton, CA
- Feb 2015 **Understanding the Proving Process with the Lens of Mathematical Creativity**, *The 18th Annual Conference on Research in Undergraduate Mathematics Education*, M. Savic*, G. Karakok, G. Tang, & H. El Turkey, Pittsburgh, PA

Poster

- Jan 2020 **Reshaping Mathematical Identity by Valuing Creativity in Calculus**, *Joint Math Meetings*, Denver, CO, USA
Jointly presented with G. Karakok and E. Cilli-Turner.
- May 2018 **Implementations of Pre-class Readings in Calculus**, *The Bucknall Conference on Effective Teaching Strategies*; University of New Haven, West Haven, CT
Poster presented by S. Turki.
- Apr 2018 **Exploring Bounds for the Frobenius Number**, *Spuyten Duyvil Undergraduate Mathematics Conference*; SCSU, New Haven, CT
Poster presented by students: A. Shackett & A. Svitlik.
- Oct 2011 **Presenting Schur Superalgebras**, *AMS Central Sectional Meeting*; University of Nebraska, Lincoln, NE
Poster mentored by J. Kujawa.

Departmental Talks

- Mar 2020 **Fostering Creativity in the Calculus Classroom**, *Department Seminar Series*; University of New Haven, West Haven, CT
- Dec 2019 **Rainbow Numbers of Z_p for $x_1 + x_2 = 4x_3$** , *Department Seminar Series*; University of New Haven, H. El Turkey and N. Waskiecwiz*, West Haven, CT
- Apr 2018 **Exploring Intersections of Teaching for Creativity, Equity, and Inquiry Instruction**, *Department Seminar Series*; University of New Haven, West Haven, CT
- Mar 2017 **McNugget Numbers**, *Math & Physics Club*; University of New Haven, West Haven, CT
- Nov 2016 **The Covering Number of Finite Rings**, *Math Department Seminar*; University of New Haven, West Haven, CT
- Feb 2016 **Explicitly Valuing Mathematical Creativity in Proof-Based Courses**, *Math Department Seminar*; University of New Haven, West Haven, CT
- Nov 2014 **Prime Numbers**, *Math & Physics Club*; University of New Haven, West Haven, CT
- Nov 2014 **Algebras...An Abstract Version of College Algebra**, *Math Department Seminar*; University of New Haven, West Haven, CT
- Feb 2013 **Left and Right Derived Functors**, *Student Algebra Seminar*; University of Oklahoma, Norman, OK
- Feb 2012 **Connection between Projective Representations and the Second Cohomology Group**, *Graduate Student Seminar*; University of Oklahoma, Norman, OK
- May 2011 **A Presentation of the Schur Algebra and Superalgebra**, *Algebra and Representation Theory Seminar*; University of Oklahoma, Norman, OK
- Oct 2010 **Schur-Weyl Duality between Partition Algebras and the Symmetric Group**, *Student Algebra Seminar*; University of Oklahoma, Norman, OK

Selected Conferences & Workshops

- Nov 2024 **MAA Northeastern Fall Sectional Meeting**, *Bridgewater State University*, Bridgewater, MA
- Oct 2024 **2024 NE-RUME Conference: The eighth Northeastern Conference on Research in Undergraduate Mathematics Education**, *Boston University*, Boston, MA
- Jun 2024 **INDRUM 2024 Conference: Fifth conference of the International Network for Didactic Research in University Mathematics**, Barcelona, Spain
- Nov 2023 **2023 NE-RUME Conference: The seventh Northeastern Conference on Research in Undergraduate Mathematics Education**, Virtual
- Jul 2023 **MAA Open Math Workshop: Designing Professional Development Programs for Graduate Student Teaching Assistants**, MAA, Virtual
- May 2023 **Creativity Conference**, *Southern Oregon University*, Virtual

- Apr 2023 **The 29th Annual Hudson River Undergraduate Conference**, *Mount Holyoke College*, South Hadley, MA
- Jan 2023 **WATC Orientation Workshop**, *University of New Haven*, Virtual
- Jan 2023 **2023 Massachusetts PKAL Regional Network Conference: Inspiring Joy for Teaching and Learning in a World of Disruption**, *UMass-Amherst*, Virtual
- Oct 2022 **2022 NE-RUME Conference: The sixth Northeastern Conference on Research in Undergraduate Mathematics Education**, Virtual
- Oct 2022 **2022 NE-COMMIT Fall Conference**, *Harvard University*, Virtual
- May 2022 **2022 Change DIAL Conference: Change in Departments and Institutions via Active Learning**, *University of Nebraska*, Virtual
- Spring 2022 **The Inclusive STEM Teaching Project Course**, *NSF-funded Program*, Virtual
- Mar 2022 **Cultivating Antiracist Dispositions and Pedagogical Practices in College Mathematics Classrooms**, *Organized by NE-COMMIT*, Virtual Workshop by Dr. Chris Jett
- Summer 2021 **2021 PEER-Chicago Workshop**, *Depaul University*, Virtual
- Fall 2020 **Advocating for Students of Color in Mathematics**, *American Mathematical Society*, Virtual
- Jul 2019 **REUF Continuation Week: Research Experiences for Undergraduate Faculty**, *The American Institute of Mathematics*, San Jose, CA
- Jun 2018 **Inquiry-Based Learning Workshop**, *The Mathematical Association of America's Carriage House*, Washington, D.C.
- Jun 2018 **REUF: Research Experiences for Undergraduate Faculty**, *The American Institute of Mathematics*, San Jose, CA
- Jun 2018 **The 2018 Summer School on Lie Theory**, *University of Georgia*, Athens, GA, USA
- May 2018 **The Bucknall Conference on Effective Teaching Strategies**, *University of New Haven*, West Haven, CT
- Apr 2018 **The Spuyten Duyvil Undergraduate Mathematics Conference**, *SCSU*, New Haven, CA
- Mar 2018 **Exploring Teaching and Learning Through Inquiry-Oriented Linear Algebra**, *UB-Yale STEM Seminar Series*, *University of Bridgeport*, Bridgeport, CT
- Feb 2018 **Critical Issues in Mathematics Education 2018: Access to mathematics by opening doors for students currently excluded from mathematics**, *MSRI*, Berkeley, CA
- Nov 2017 **MAA Northeastern Sectional Meeting**, *Sacred Heart University*, Fairfield, CT
- Apr 2017 **Embedded Support: How it helps, Why it works**, *Eastern Connecticut State University*, Willimantic, CT
- Nov 2016 **Transforming Undergraduate STEM Education: Implications for 21st Century Society**, *EAAC&U*, Boston, MA
- Nov 2016 **MAA Northeastern Sectional Meeting**, *Trinity College*, Hartford, CT
- Oct 2016 **Circle on the Road**, *Courant Institute of Mathematical Sciences*, New York University, New York, NY
- Oct 2016 **RUME with a View**, *University of Oklahoma*, Norman, OK
- May 2016 **Algebraic Groups, Quantum Groups and Geometry**, *University of Virginia*, Charlottesville, VA
- Aug 2015 **Project NExT Workshop**, *Washington DC*.

- Jun 2015 **Conference on Representation Theory, Number Theory and Invariant Theory (In honor of Roger Howe)**, *Yale University*, New Haven, CT
- May 2015 **Conference on Representation Theory and Related Topics**, *University of Connecticut*, Storrs, CT
- Jan 2015 **Joint Mathematics Meetings**, *San Antonio, TX*
- Sep 2014 **Discovering the Art of Teaching Mathematics IBL Workshop**, *Quinnipiac University*, Hamden, CT
- Nov 2013 **Conference on Geometric Methods in Representation Theory**, *University of Missouri*, Columbia, MO
- Apr 2012 **AMS Central Sectional Meeting**, *University of Kansas*, Lawrence, KS
- Apr 2012 **TORA II : Texas - Oklahoma Representations and Automorphic Forms II**, *Oklahoma State University*, Stillwater, OK
- Jun 2011 **Southeastern Lie Theory Workshop III: Finite and Algebraic Groups**, *University of Virginia*, Charlottesville, VA
- May 2010 **Second Southeastern Lie Theory Conference and VIGRE Summer School**, *University of Georgia*, Athens, GA

Fellowships & Grants

Fellowships

2021–2022 **CTE Faculty Fellow**

As a faculty fellow at the Center for Teaching Excellence (F21, S22, F22), I supported our faculty through professional development opportunities on various topics (e.g., Scholarship of Teaching and Learning (SoTL), online teaching, inclusive pedagogy, high-impact practices). I prepared programming that will enhance pedagogy across the university. The selection to the program included a 3 credit release per semester and an annual stipend (\$2500 per year).

2019–2022 **University Research Scholar**

Appointment as a URS is intended to enhance the competitive position of faculty to secure external funding to continue their work. With this recognition, the University of New Haven provides additional support for University Research Scholars to develop preliminary results that will make subsequent grant proposals successful. This support includes both partial teaching workload release during the three academic years of the designation and a modest recovery (\$4000 per year) of ancillary research expenses.

2015–2016 **Project NExT Fellow**

A professional development program of the MAA for recent Ph.D. graduates. Fellows attended panels, workshops, and talks to build skills in research, teaching, and undergraduate research. A mentoring and networking component is also included.

2008–2013 **Foundation Fellow**

A five-year scholarship (\$ 5000 per year) program at the University of Oklahoma for Ph.D. students in addition to the regular tuition waiver and the monthly stipend.

Grants

- Jul 2024 **Co-Principal Investigator**, *Collaborative Research: Infusing Creativity-Fostering Instruction in Coordinated Calculus Courses*, NSF-IUSE, total \$750,000; UNH budget: \$272,087, **not funded**
- Jun 2023 **Co-Principal Investigator**, *Collaborative Research: Creativity-Fostering Instruction in Coordinated Calculus Courses*, NSF-IUSE, \$705,724; UNH budget: \$330,786, **not funded-NSF Review Panel recommended re-submission**
- Jul 2022 **Co-Principal Investigator**, *Collaborative Research: MC⁴: Mathematical Creativity in Coordinated Calculus Courses*, NSF-IUSE, \$598,018, **not funded-NSF Review Panel recommended re-submission**
- Mar 2022 **Faculty Consultant**, *Opening Mathematical Curtains: Unveiling Graduate Students' Creativity*, NSF-IGE, \$499,841, **not funded**

- Aug 2021 **Principal Investigator**, *Fostering mathematical creativity in Calculus III using creativity-based tasks*, PEER Workshop Mini-grant, \$250, **funded**
- Nov 2018 **Co-Principal Investigator**, *Mathematics Undergraduates' Attendance to MAA MathFest*, Elsevier Mathematical Sciences Sponsorship, \$5,000, **not funded**
- Oct 2018 **Faculty Consultant**, *Collaborative Research: Reshaping Mathematical Identity by Valuing Creativity in Calculus*, NSF-IUSE, \$299,780, **funded**
- Nov 2017 **Principal Investigator**, *Fostering Creativity Through Research-based Task Design in Undergraduate Mathematics Courses*, Spencer Foundation, \$50,000, **not funded**
- Oct 2017 **Member of UNH Leadership Team**, *2018 HHMI Inclusive Excellence Grant*, Howard Hughes Medical Institute, \$5,042,711, **not funded**
- Jan 2017 **Co-Principal Investigator**, *I-SUCCESS: Inclusive Strategies for Undergraduate Course Coordination and Enhanced Student Success*, NSF, \$598,845, **not funded**
- Nov 2016 **Co-Principal Investigator**, *Undergraduates' Attendance to MAA MathFest*, Elsevier Mathematical Sciences Sponsorship, \$5,000, **not funded**
- Apr 2015 **Principal Investigator**, *Early Mathematician Grant*, Simons Foundation, \$4,000, **not funded**

Travel Grants

- Spring 2024 **Research Fund, University of New Haven**, *Conference travel*, \$2000, **funded**
- Spring 2023 **Research Fund, University of New Haven**, *Conference travel*, \$2000, **not funded**
- Fall 2019 **Network of IBL Communities**, *Fall 2019 NE-IBLM Conference*, ECSU, CT, \$250, **funded**
- Spring 2019 **Research Fund, University of New Haven**, *Conference travel*, \$2000, **funded**
- Summer 2019 **The American Institute of Mathematics**, *Continuation Proposal to Fund a Research Retreat for 6 Researchers*, **funded**
- Summer 2018 **The American Institute of Mathematics**, *REUF: Research Experiences for Undergraduate Faculty*, San Jose, CA, **funded**
- Summer 2018 **University of Georgia**, *2018 Summer School on Lie Theory*–UGA, Athens, GA, \$500, **funded**
- Summer 2018 **Academy of Inquiry-Based Learning**, *2018 IBL Workshop*, Washington, D.C., \$300, **funded**
- Spring 2018 **MSRI–Mathematical Sciences Research Institute**, *Critical Issues in Mathematics Education 2018*, Berkeley, CA, \$280, **funded**
- Spring 2017 **Research Fund, University of New Haven**, *2018 Joint Mathematics Meetings–San Diego, CA*, \$1050, **funded**
- Fall 2016 **Provost's Office, University of New Haven**, *2016 AAC&U conference: Transforming Undergraduate STEM Education*–Boston, MA, \$1700, **funded**
- Fall 2016 **American Mathematical Society**, *2017 Mathematical Congress of the Americas*, Canada, \$1500, **not funded**
- Spring 2015 **AMS Simon's Foundation**, *Two year travel support for early mathematicians*, \$4000, **not funded**
- Spring 2014 **American Mathematical Society**, *2014 Joint Mathematics Meetings–Baltimore, MD*, \$500, **funded**
- Spring 2014 **Robberson Conference Presentation & Creative Exhibition Travel Grant–Graduate College, University of Oklahoma**, *2014 Joint Mathematics Meetings–Baltimore, MD*, \$500, **funded**
- Spring 2012 **American Mathematical Society**, *Spring AMS Central Sectional Meeting*–University of Kansas, Lawrence, KS, \$250, **funded**

- Fall 2011 **American Mathematical Society**, *Fall AMS Central Sectional Meeting*–University of Nebraska, Lincoln, NE, \$250, **funded**
- Summer 2011 **University of Virginia**, *Southeastern Lie Theory Workshop III*–UVA, Charlottesville, VA, \$500, **funded**
- Summer 2010 **University of Georgia**, *VIGRE Summer School*–UGA, Athens, GA, \$500, **funded**

Awards

- Spring 2023 **Sabbatical Leave Award**, *University of New Haven*, West Haven, CT
- May 2019 **Faculty Merit Award**, *University of New Haven*, West Haven, CT
- Apr 2014 **Certificate of Distinction for Outstanding Graduate Teaching Assistant**, *Provost Office*, *University of Oklahoma*, Norman, OK
- Apr 2013 **Overall Outstanding Graduate Student Award**, *Graduate Student Senate*, *University of Oklahoma*, Norman, OK
- Jun 2006 **Jamal Abdul-Naser Award for Academic Excellence**, *Beirut Arab University*, Beirut, Lebanon
- 2002–2006 **Full Annual Scholarship**, *Beirut Arab University*, Beirut, Lebanon

Nominations

- Apr 2024 **Excellence in Research or Creative Activity Award**, *University of New Haven*, West Haven, CT, by colleague's nomination
- Apr 2023 **Excellence in Research or Creative Activity Award**, *University of New Haven*, West Haven, CT, by chair's nomination
- Oct 2022 **The Bucknall Excellence in Teaching Award**, *University of New Haven*, West Haven, CT, by the Chair's nomination
- Apr 2022 **Excellence in Teaching Award, Full-Time Faculty**, *University of New Haven*, West Haven, CT, by a colleague's nomination
- Apr 2020 **Excellence in Research or Creative Activity Award**, *University of New Haven*, West Haven, CT, by colleagues' nominations
- Oct 2019 **The Bucknall Excellence in Teaching Award**, *University of New Haven*, CT, USA, self-nominated
- Apr 2019 **Excellence in Teaching Award, Full-Time Faculty**, *University of New Haven*, West Haven, CT, by students' nominations
- Apr 2018 **Excellence in Teaching Award, Full-Time Faculty-by students' nominations**, *University of New Haven*, West Haven, CT, by students' nominations
- Apr 2018 **Excellence in Research or Creative Activity Award**, *University of New Haven*, West Haven, CT, by colleagues' nominations
- Oct 2017 **The Bucknall Excellence in Teaching Award**, *University of New Haven*, West Haven, CT, self-nominated
- Apr 2016 **Excellence in Teaching, Full-Time Faculty**, *University of New Haven*, West Haven, CT, by colleague's nomination

Service

Mathematics Department-University of New Haven

- 2024–Present **Department Outreach Committee Member**, We worked on presentations and brochures for open houses and accepted student days. I participated in discussions on engagement with industry and alumni
- 2019–2024 **Department Curriculum Committee Chair**, Revise the mathematics curriculum, discuss and modify existing programs, and propose new possible tracks such as a new B.S. in Actuarial Science, a new 4+1 program between Math and Data Science, etc

- 2016–
Present **Academic Advising**, I am the primary or secondary academic advisor for many math and actuarial science majors
- 2023–24 **Search Committee Chair**, Two searches for full-time non tenure-track Lecturer positions. We hired one NTT
- 2021–2022 **Department Seminar Organizer**, I have organized and facilitated the department seminar series where I invited speakers who presented on various topics such as careers in mathematics, data science, standards-based grading, etc.
- 2017–21 **Mathematics Coordinator**, Duties include: Transfer credit authorization, overrides into classes, scheduling of classes and faculty assignments, hiring part-time adjunct faculty, outreach activities, classroom observations, advising math minors, etc.
- 2018–19 **Search Committee Chair**, Two searches for full-time non tenure-track Lecturer positions
- 2018–19 **Calculus Committee Chair**, We have implemented a common final across all Calculus I sections and we ran few recitation classes for Calculus I & II. This includes selecting and training student tutors to lead the recitations
- 2017-18 **Search Committee Member**, Two searches for Assistant Professor and Chair positions
- 2017 **Pi Mu Epsilon Petition Faculty Advisor**, I helped the president of the Math and Physics Club in writing a petition to have a PME chapter at the university
- 2015–17 **Master’s Program Committee Member**, I worked on the financial analysis of the program and gave feedback on the subsequent drafts of the proposal
- 2015–2021 **Department Awards Committee Chair**, Every Spring, we select 4 students in Mathematics and Physics for their academic excellence
- 2014–17 **Math & Physics Club Faculty Advisor**, Activities include: Field trips, game nights, presentations, etc
- 2014–16 **Department Core-Curriculum Committee Chair**, We coordinated with the Core Curriculum Task Force regarding the mathematics courses and we submitted the necessary forms for CC 3.1 category
- 2014 **Mastery Test Committee Member**, I provided a pool of questions to be used on these tests

College & University- University of New Haven

- 2024–
Present **CAS T&P Committee** , I was elected as a member of the CAS Tenure and Promotion Committee. In Fall 2024, we discussed three application for tenure and/or promotion
- 2024–
Present **CAS Working Group on Engagement with alumni, donors, and industry** , I was selected as a representative of the Math department in the natural sciences sphere
- 2023–
Present **CTE Director**, I was selected as a director of the Center for Teaching Excellence. Duties include: organizing workshops, panel discussions, and training; securing internal and external speakers; marketing and communications of events; maintaining an updated webpage and presence on mycharger; keeping track of CTE budget; hiring and working with faculty fellows; hiring and working with a Student Assistant; running different programs such as Open Classroom Program and Thank-a-Prof program; selecting winners of teaching awards such as the annual Excellence in Teaching Awards and the Bucknall Teaching Award; etc.
- 2021–
Present **MSA Faculty Advisor**, I am the faculty advisor for the Muslim Student Association
- 2023–
Present **Faculty Affairs Committee Member**, I was elected to a CAS seat on the Faculty Affairs Committee (FAC). We discussed revising the FAR categories, NTT re-titling, benefits, COLA, benchmark, etc.
- 2023–
Present **Faculty Senate**, I was elected to the Faculty Senate for a CAS seat

- Fall 2023–Fall 2024 **Doctoral Thesis Committee Chair**, I served as the chair of the dissertation committee for Jeffrey Shuman, a doctoral student in Allied Health. The proposed title is: Exploring Allied Health Professionals Readiness to Transition Into Educators at the Associate Degree Level. Jeff successfully defended his dissertation
- 2021–24 **Core Curriculum Subcommittee Member**, I was elected to a CAS seat on the Core Curriculum Subcommittee; I was on a sabbatical leave in Spring 2023
- 2022–2023 **VP-DEIAB Search Committee Member**, I was selected as a member of the search committee for the VP of DEIAB. Duties include: regular meetings with the search committee and search firm; assessing 33 applications and choosing 10 semifinalists; zoom interviews with 10 semifinalists; attending 5 on-campus interviews; participating in final recommendations.
- Fall 2022 **Core Curriculum Innovation Committee Member**, I was selected as a member on the Core Curriculum Innovation Committee
- 2019–22 **Faculty Senate**, I was elected to the Faculty Senate for one CAS seat; I took a leave in 2022-2023
- 2021–2022 **CTE Faculty Fellow**, I was elected as one of four faculty fellows to support the CTE’s mission at the University of New Haven
- 2020–21 **Academic Planning Committee Member**, I was selected as member on the committee which supported the Covid Task Force from an academic lens
- Spring 2020 **Search Committee Member Member**, Assistant Professor Position in Data Science
- 2019 **CAS Awards Committee Member**, I helped in the organization process and I made the program for the ceremony
- 2018–2019 **Evaluator**, I evaluated posters at the First Year Expo in Fall 2019, Spring 2019, Fall 2018, and Spring 2018
- 2017–2018 **Reviewer**, I reviewed SURF applications in Spring 2018 and Spring 2017
- 2017–19 **University Enrollment Management Advisory Committee Member**, I was elected as a member
- 2016–Present **Recommendation letter writer**, I have written letters of recommendations for students for graduate schools, scholarships, tutoring positions in CLR, Honors Program, REU’s, and internships
- 2016–19 **Faculty Liaison**, Liaison of the UNH women’s tennis team
- 2015–16 **Volunteer**, I read names of graduates during winter commencements
- 2015 **CAS Awards Committee Member**, I helped in the logistics of the ceremony and I sent the emails to all students who were awarded

Community

- Spring 2021–Present **MAA Committee Member**, *Mathematical Association of America Committee on Faculty and Departments*, The Committee is tasked with developing ‘best practices’ related to teaching, curriculum, retention, etc. Our recent work involved developing a statement for ‘best practices’ on DEI and revising another statement on faculty recruitment, development, and retention, <https://maa.org/programs-and-communities/professional-development/committee-on-faculty-and-departments/guideline-statement-6>
- 2017–Present **Reviewer**, I have served as a reviewer for academic journals (PRIMUS, IJMEST), conference proceedings (DELTA, ICME, RUME, PME-NA, MCG), and book chapters (Springer)

2016–Present **Co-organizer & Moderator**, I have co-organized and moderated numerous sessions at conferences: the MAA contributed session on “Fostering Creativity in Undergraduate Mathematics Courses” at the 2020 Joint Mathematics Meetings in Denver. I co-organized the MAA contributed session on “Fostering Creativity in Undergraduate Mathematics Courses” at the 2019 Joint Mathematics Meetings in Baltimore. I participated in reviewing the submitted abstracts and choosing the speakers. I was the moderator for a MAA contributed paper session on Number Theory at the 2018 Joint Mathematics Meetings in San Diego. I co-organized a Project NExT session on Teaching and Assessing Proof-Writing at the 2016 MAA MathFest in Columbus. I participated in choosing the speakers (session leaders) from experienced mathematics educators. I was the moderator for a MAA contributed paper session on Algebra at the 2016 Joint Mathematics Meetings in Seattle, USA

Fall 2021–Spring 2022 **Project NExT Consultant**, *I was selected as an MAA Project NExT Consultant to mentor a mathematics faculty member at another institution*

Spring 2020 **Local Arrangements Chair**, *I organized the logistics for the Spring NE-IBLM Workshop; it was canceled due to pandemic, University of New Haven, West Haven, CT, USA*

2018–20 **Co-editor**, *Special Issue of Journal of Humanistic Mathematics*, I co-edited with the Creativity Research Group a special issue on mathematical creativity, <https://scholarship.claremont.edu/jhm/vol110/iss2/3/>

2018–2019 **Judge**, *Joint Mathematics Meeting*, I served as a judge in the MAA undergraduate student poster session at the 2018 and 2019 JMM, USA

Spring 2018 **Local Arrangements Committee Chair**, *I hosted and co-organized the MAA Northeastern Sectional Meeting, University of New Haven, West Haven, CT, USA*

Fall 2017 **Program Committee Member**, *MAA Northeastern Sectional Meeting*, The committee selected plenary speakers, Sacred Heart University, Fairfield, CT, USA

Fall 2016 **Local Arrangements Committee Member**, *MAA Northeastern Sectional Meeting*, Trinity College, Hartford, CT, USA

Mathematics Department-University of Oklahoma

2012 **Graduate Committee Member**, Student Representative on the Department’s Graduate Committee

Spring 2012 **President**, Mathematics Graduate Students Association

Spring 2011–12 **Vice President**, Mathematics Graduate Students Association

2011 **Organizer**, Graduate Student Seminar

2010 **Organizer**, Student Algebra Seminar

Memberships

2014–Present **Mathematical Association of America (MAA)**

2010–Present **American Mathematical Society (AMS)**

Computer Skills

L^AT_EX, Python, Mathematica, Microsoft Office, Google Suite