# CURRICULUM VITAE SABA GERAMI

#### December 2019

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#### **EDUCATION**

Ph.D. In Progress Mathematics Education, University of Michigan, MI

M.S. 2015 Mathematics, California Polytechnic University- San Luis Obispo, CA

B.S. 2013 Mathematics, University of California- Los Angeles, CA A.A. 2010 Liberal Arts and General Science, Santa Monica College, CA

#### **GRANTS AND FELLOWSHIPS**

2019 Harold and Vivian Shapiro/John Malik/Jean Forrest Award, University of Michigan, MI

Rackham Graduate Student Research Grant, University of Michigan, MI 2019

Rackham Merit Fellowship, University of Michigan, MI 2017-2022

#### **GRANTS IN REVIEW**

2019 Co-authored the proposal for Improving Undergraduate STEM Education: Education and

> Human Resources (IUSE: EHR), National Science Foundation (NSF). Proposal title: Mathematics, Equity, and Inquiry-based Learning (ME&IBL) Toward an empirical characterization of its variability-1234-5678 (PIs: Professor Patricio Herbst and Professor

Vilma Mesa).

#### RESEARCH EXPERIENCE

2017-Present Research assistant, School of Education, University of Michigan

Project: Undergraduate Teaching and Learning Mathematics with Open Software and

Textbooks (UTMOST). Funded by NSF

Principal Investigators: Robert Beezer, Thomas Judson, Vilma Mesa, Vilma Mesa, David

Farmer, Susan Lynds, Kent Morrison.

Responsibilities include creating a grading instrument for coding Linear Algebra and Abstract Algebra student knowledge tests, coding student knowledge tests, maintaining records, and creating teacher reports for participating teachers and research reports (e.g., descriptive statistics, reliability scores, Cohen's kappa scores), mentoring undergraduate

student workers.

2017-2019 Research assistant, School of Education, University of Michigan

Project: Algebra Instruction @ Community College (AI@CC). Funded by NSF

Principal Investigators: Laura Watkins, Vilma Mesa, Irene Duranczyk, April Ström, Nidhi

Kohli

Responsibilities include training and overseeing eight undergraduate research assistants for data collection across two community colleges nearby, creating protocols for data collection and performing data collection, analysis tasks such as coding, and maintaining records, designing and leading professional development for community college mathematics

instructors in Michigan

2019 Research apprentice, School of Education, University of Michigan

Project: Developing the Theory of Communicating Mathematically Across Student

Differences in the Work of Teaching. Funded by NSF

Principal Investigators: Deborah Ball, Maisie Gholson, Mark Hoover

Responsibilities included investigating conceptual and theoretical frameworks and analyzing

data

#### **TEACHING EXPERIENCE**

2018	Teaching apprentice, Department of Mathematics, University of Michigan
	Math 431: Geometry for Secondary Teachers

Instructor: Hanna Bennett

Mathematics modeling instructor, Center for Talented Youth (CTY), John Hopkins 2018

University in partnership with Sandoog Al Watan, Abu Dhabi, UAE

2016-2017 Mathematics lecturer, California Polytechnic State University- San Luis Obispo, CA

Courses taught: Calculus I-III, business Calculus, Linear Analysis (combination of Linear

Algebra and Differential Equations), and The Nature of Modern Math

2016-2017 Part-time mathematics instructor, Allan Hancock College, Santa Maria, CA

Courses taught: College Algebra and College Statistics

2017-2017 Math tutor, XYZ Textbooks/Math TV, San Luis Obispo, CA

Responsibilities included creating video explanations of examples in various subjects such

as Algebra, pre-Calculus, Calculus for life sciences, Business Calculus

2014-2015 Mathematics Teaching Associate, California Polytechnic State University- San Luis Obispo,

Courses taught: pre-Calculus, Trigonometry

Mathematics and science tutor, 310 Tutors, Los Angeles, CA 2012-2014

Tutored K-12 and college students in various subjects and standardized tests

Multivariable Calculus Facilitator, Peer Math Learning Project, UCLA Mathematics 2012-2013

Department, Los Angeles, CA

Responsibilities included holding sessions of math-studying and test-taking strategies, problem-solving, and material clarification with the students 3 times a week, creating

worksheets and exam solutions in parallel to the lectures of course instructors

#### **AWARDS AND HONORS**

2016	Keynote Speaker, Middle Eastern Graduation Ceremony, California Polytechnic
	University- San Luis Obispo, CA
2015	Outstanding Teaching Associate Award, California Polytechnic University- San Luis Obispo, CA
2010	Honored by the chair leader of SMC Math Department as one of the best math tutors of the year

### PROFESSIONAL TRAINING

2019	Intersectionality at 30, Diversity, Inclusion, Justice and Equity (DIJE) conversations. School of Education, University of Michigan, MI
2019	"Doing the Work Our Souls Must Have": Towards Anti-Racist Praxis. DIJE conversations. School of Education, University of Michigan, MI
2019	Teaching for Inclusion and Equity, Inclusive Teaching @ Michigan Series, Center for Research on Learning and Teaching (CRLT), University of Michigan, MI
2019	Principles and Practices of Anti-Racist Pedagogy, Inclusive Teaching @ Michigan Series, Center for Research on Learning and Teaching (CRLT), University of Michigan, MI
2019	Applying Principles of Transparency to Classroom Discussions, Inclusive Teaching @ Michigan Series, Center for Research on Learning and Teaching (CRLT), University of Michigan, MI
2019	Disability and Accessible Teaching: Current Perspectives and Best Practices, Inclusive Teaching @ Michigan Series, Center for Research on Learning and Teaching (CRLT), University of Michigan, MI
2019	Making Choices about How to Address the World Beyond Your Classroom, Inclusive Teaching @ Michigan Series, Center for Research on Learning and Teaching (CRLT), University of Michigan, MI
2018	Instrument Validation Workshop led by Matt Diemer, University of Michigan, MI
2015	Inquiry-Based Learning Workshop led by Stan Yoshinobu, Matthew Jones, and Carol Schumacher, San Luis Obispo, CA

### **INVITED TALKS**

2019 Exploring Teacher and Student Roles in Inquiry-Based Learning Classrookms using Systemic Functional Linguistics (SFL), SFL at UofM club, University of Michigan, MI

# **PUBLICATIONS**

### **Book Chapters**

Mali, A., **Gerami, S.**, Ullah, A., & Mesa, V. (2019). Teacher questioning in problem solving in community college algebra classrooms. In P. Felmer, P. Liljedahl, & B. Koichu (Eds.), *Problem solving in mathematics instruction and teacher professional development* (pp. 317-335). Research in Mathematics Education. Springer, Cham.

# Manuscripts under Review

**Gerami, S.**, Leckrone, L., & Mesa, V. (2019). Exploring instructor questions in community college algebra classrooms and its connections to instructor knowledge and student outcomes, University of Michigan, Ann Arbor MI. Prepared for Special Issue of MathAMATYC.

Lim, D., Kimani, P., Duranczyk, I., Watkins, L., **Gerami, S.**, Breit-Goodwin, M., & Cawley, A. (2019). Connecting across representations in community college algebra: lessons from the classroom, Prepared for Special Issue of MathAMATYC.

# Manuscripts in Preparation

**Gerami, S.**, & Mesa, V. Conceptualizing inquiry in undergraduate inquiry-based learning (IBL) classrooms. Preparing for IJRUME.

**Gerami, S.**, & Mesa, V. Investigating instructors' perceptions of IBL: A systemic functional linguistic approach. Preparing for PRIMUS.

**Gerami, S.**, & Mesa, V. Investigating instructors' and students' roles in IBL: A systemic functional linguistic approach. Preparing for IJRUME.

### **Technical Reports**

Mesa, V., Liakos, Y., Chamberlain, L., & **Gerami, S.** (2019). Final report for participating faculty, Spring 2019. University of Michigan, Ann Arbor MI.

**Gerami, S.** (2019). Protocol for coding and recording student knowledge tests. UTMOST 3. University of Michigan, Ann Arbor MI.

Gerami, S., & Evans, C. (2019). Grading rubric of UTMOST calculus student knowledge test. UTMOST 3. University of Michigan, Ann Arbor, Michigan.

**Gerami, S.** (2019). Grading rubric of UTMOST linear algebra content questions in student knowledge test. UTMOST 3. University of Michigan, Ann Arbor, Michigan.

**Gerami, S.** (2019). Grading rubric of UTMOST abstract algebra content questions in student knowledge test. UTMOST 3. University of Michigan, Ann Arbor, Michigan.

**Gerami, S.** (2019). Grading rubric of UTMOST abstract algebra and linear algebra maturity questions in student knowledge test. UTMOST 3. University of Michigan, Ann Arbor, Michigan.

**Gerami, S.**, & Niglas, K. (2018). Grading rubric of UTMOST abstract algebra and linear algebra student knowledge test. University of Michigan, Ann Arbor, Michigan.

**Gerami, S.**, & Mesa, V. (2018). *UTMOST beginning of term test of student knowledge, section 311008*. (Technical Report) University of Michigan, Ann Arbor MI.

**Gerami, S.**, & Mesa, V. (2018). *UTMOST beginning of term test of student knowledge, section 321005*. (Technical Report) University of Michigan, Ann Arbor MI.

**Gerami, S.**, & Mesa, V. (2018). *UTMOST beginning of term test of student knowledge, section 312010.* (Technical Report) University of Michigan, Ann Arbor MI.

**Gerami, S.**, & Mesa, V. (2018). *UTMOST beginning of term test of student knowledge, section 311009.* (Technical Report) University of Michigan, Ann Arbor MI.

**Gerami, S.**, & Mesa, V. (2018). *UTMOST beginning of term test of student knowledge, section 311011.* (Technical Report) University of Michigan, Ann Arbor MI.

**Gerami, S.**, & Mesa, V. (2018). *UTMOST beginning of term test of student knowledge, section 311012.* (Technical Report) University of Michigan, Ann Arbor MI.

**Gerami, S.**, & Mesa, V. (2018). *UTMOST end of term test of student knowledge, section 311008*. (Technical Report) University of Michigan, Ann Arbor MI.

**Gerami, S.**, & Mesa, V. (2018). *UTMOST end of term test of student knowledge, section 321005*. (Technical Report) University of Michigan, Ann Arbor MI.

**Gerami, S.**, & Mesa, V. (2018). *UTMOST end of term test of student knowledge, section 312010*. (Technical Report) University of Michigan, Ann Arbor MI.

**Gerami, S.**, & Mesa, V. (2018). UTMOST end of term test of student knowledge, section 311009. (Technical Report) University of Michigan, Ann Arbor MI.

**Gerami, S.**, & Mesa, V. (2018). *UTMOST end of term test of student knowledge, section 311011*. (Technical Report) University of Michigan, Ann Arbor MI.

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**Gerami, S.**, & Mesa, V. (2018). *UTMOST beginning of term test of student knowledge, section 221005.* (Technical Report) University of Michigan, Ann Arbor MI.

**Gerami, S.**, & Mesa, V. (2018). *UTMOST beginning of term test of student knowledge, section 211008*. (Technical Report) University of Michigan, Ann Arbor MI.

**Gerami, S.**, & Mesa, V. (2018). *UTMOST beginning of term test of student knowledge, section 222007.* (Technical Report) University of Michigan, Ann Arbor MI.

**Gerami, S.**, & Mesa, V. (2018). *UTMOST end of term test of student knowledge, section, 221005.* (Technical Report) University of Michigan, Ann Arbor MI.

**Gerami, S.**, & Mesa, V. (2018). UTMOST end term test of student knowledge, section 211008. (Technical Report) University of Michigan, Ann Arbor MI.

**Gerami, S.**, & Mesa, V. (2018). UTMOST end of term test of student knowledge, section 222007. (Technical Report) University of Michigan, Ann Arbor MI.

**Gerami, S.**, & Mesa, V. (2017). Addendum to the observation protocol: Version 5.2: University of Michigan Employees. University of Michigan, Ann Arbor, Michigan.

#### PRESENTATIONS IN CONFERENCES

Research on Teaching Mathematics in Undergraduate Settings Research Group (RTMUS), Mesa, V., & Gerami, S. (2020, July). Teaching and learning with dynamic textbooks: Studying student uses at scale. International Congress on Mathematical Education (ICME-14), Shanghai, China.

**Gerami, S.**, & Mesa, V. (2020, Feburary). Investigating instructors' perceptions of IBL: A systemic functional linguistic approach. Research in Undergraduate Mathematics Education (SIGMAA-RUME), Boston, Massachusetts.

Mesa, V., **Gerami, S.**, & Liakos, Y. (2020, February). Exploring the relationship between textbook format and student outcomes in undergraduate mathematics courses. Research in Undergraduate Mathematics Education (SIGMAA-RUME), Boston, Massachusetts.

Lim, D., & **Gerami, S.** (2019, November). Connecting across representations in algebra instruction. AMATYC Annual Conference, Milwaukee, Wisconsin.

**Gerami, S.**, & Mesa, V. (2019, June). What do you mean when you say IBL? A systemic functional linguistic approach. National Inquiry-Based Learning and Teaching Conference, Sheraton Denver Downtown Hotel, Denver, Colorado.

Leckrone, L., **Gerami, S.**, & Mesa, V. (2019, March). Exploring the impact of instructor questions in community college algebra classrooms. Research in Undergraduate Mathematics Education (SIGMAA-RUME), Renaissance Oklahoma City Convention Center Hotel, Oklahoma City, Oklahoma.

**Gerami, S.** (2019, March). Teacher intellectual risk-taking: towards student-centered mathematics classroom. Graduate Student Community Organization (GCSO) Graduate Student Conference, University of Michigan, Ann Arbor, Michigan.

### Conference Proceedings

**Gerami, S.**, & Mesa, V. (2020). *Investigating instructors' perceptions of IBL: A systemic functional linguistic approach.* Paper [to be] presented at the 23rd Annual Conference on Research on Undergraduate Mathematics Education, Boston, MA.

Mesa, V., **Gerami, S.**, & Liakos, Y. (2020). Exploring the relationship between textbook format and student outcomes in undergraduate mathematics courses. Paper [to be] presented at the 23rd Annual Conference on Research on Undergraduate Mathematics Education, Boston, MA.

### PROFESSIONAL SERVICE

# Journal Article Reviewer

Eurasia journal of mathematics, Science and Technology Education.

# Conference Proposal and Proceeding Reviewer

2019	International Congress on Mathematical Education (ICME-14), Shanghai, China.
2018	Poster presentation judge, 2018 spring research symposium, Undergraduate Research
	Opportunity Program (UROP), University of Michigan

# Conference Organizer

2019-2020	Conference planning member, Graduate Student Research Conference (GSRC), University of Michigan
<u>Other</u>	
2019	Steering committee member, Community College Interdisciplinary Research Forum (CCIRF), University of Michigan
2018	Doctoral student honorary panelist, Mathematics department, California Polytechnic State University- San Luis Obispo
2018	Volunteer panelist, Incoming-student Orientation, School of Education, University of Michigan, Ann Arbor, MI
2011	Volunteer teacher, Princeland Academy, Tema, Ghana
	Taught a supporting math and science class in a middle school in an extremely underprivileged district in order to increase the high school admission rate and lower the dropout rate for students from low-income families
2008-2010	Volunteer mathematics and science tutor, EOPS (The Extended Opportunity Programs and Services) Office and Math Lab, Santa Monica College, Santa Monica, CA
	Responsibilities included tutoring students in all levels of lower division mathematics, including Geometry, Pre-Calculus, Calculus, Differential Equations, and Linear Algebra, counseling students with economical and educational disadvantages, assisted in holding student seminars and orientations in order to ease their path to success

# PROFESSIONAL MEMBERSHIPS AND AFFILIATIONS

MAA (Mathematical Association of America), USA

AERA (American Educational Research Association), North America

SIGMAA-RUME (Special Interest Group of the MAA on Research in Undergraduate Mathematics Education)

# LANGUAGE SKILLS

English and Farsi: speaking, reading, writing

### **COMPUTER LANGUAGES**

LaTeX, MPlus, Stata, C++ (beginner)