

# Curriculum Vitae

## Yariana Diaz

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### EDUCATION

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<b>University of Iowa</b> <i>Doctor of Philosophy, Mathematics</i>	Iowa City, IA <i>Aug. 2018 – Present</i>
<b>University of Iowa</b> <i>Masters of Science, Mathematics</i>	Iowa City, IA <i>Aug. 2018 – Dec. 2020</i>
<b>Amherst College</b> <i>Bachelor of Arts, Mathematics and Music</i>	Amherst, MA <i>Aug. 2014 – May 2018</i>

### RESEARCH EXPERIENCE

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- (with Ryan Kinser) Total Stability of Quiver Representations**  
*University of Iowa, Iowa City, IA* *2019 – Present*
- Learned and wrote code in Python and GAP to aid in computations
- (with Felice Manganiello) Coding Theory REU**  
*Clemson University, Clemson, NC* *Summer 2017*
- Presented two talks on mathematical modeling of disease and fractal geometry
  - Gave three group presentations on original research
  - Learned math software programs Magma and Sage (Python) to aid in research

### PUBLICATIONS

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- [1] Y. Diaz, C. Gilbert, and R. Kinser, “Stability conditions and Auslander-Reiten sequences for Dynkin quivers,” *in preparation*.
- [2] T. Bambaugh, Y. Diaz, S. Friesenhahn, F. Manganiello, and A. Vetter, “Batch codes from Hamming and Reed-Muller codes,” *Journal of Algebra Combinatorics Discrete Structures and Applications*, vol. 5, pp. 153 – 165, 2018.

### INVITED PRESENTATIONS

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- Untitled**, AMS Spring Southeastern Sectional Meeting, Special Session on Interactions Between Noncommutative Ring Theory and Algebraic Geometry (University of Virginia - Charlottesville, VA; scheduled March 11-13)
- Total Stability Functions for Dynkin Quivers and Almost Split Sequences**, AMS Spring Western Sectional Meeting, Special Session on Quivers, Tensors, and Their Applications (virtual, May 1, 2021)
- Total Stability Functions for Dynkin Quivers and Almost Split Sequences**, AMS Spring Eastern Sectional Meeting, Special Session on Hopf Algebras, Tensor Categories, and Related Homological Methods (virtual, March 20, 2021)

## TEACHING EXPERIENCE

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### **Teaching Assistant**, University of Iowa

Abstract Algebra II (graduate level) (online, Spring 2021)

Quantitative Reasoning for Business (online, Fall 2020)

Mathematics for the Biological Sciences (Fall 2019)

### **Grader**, University of Iowa

Engineer Math IV: Differential Equations (partially online, Spring 2020)

## SERVICE

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**Senator**, Representative of mathematics graduate students in Graduate Student Senate and Graduate Student Employment Committee of University, Iowa (Fall 2021)

**Directed Reading Program Organizer**, Organized small reading groups between undergraduate and graduate math students, University of Iowa (Fall 2021)

**STEM Factory Volunteer**, Multicultural Development Center of Iowa (Fall 2021)

**Directed Reading Program on Cryptography**, Graduate mentor to undergraduate Computer Science student, University of Iowa (online, Fall 2020)

**GPSG Grant Reviewer**, University of Iowa (Fall 2019 – Spring 2020)

**Volunteer Math Tutor**, Center for Worker Justice of Eastern Iowa (Summer 2019)