

**Anthony Stefan**  
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## Education

**Florida Southern College**, Lakeland, FL  
*Bachelor of Science: Mathematics*, May 2019  
Career GPA: 3.65/4.0

**Florida Institute of Technology**, Melbourne, FL  
*Masters of Science: Applied Mathematics, Expected May 2020*  
GPA: 3.66/4.0

## Teaching Experience

### Mathematics Advancement Center

- *GSA*, August 2019 – Present
- One-to-one or group assisting students in mathematics for courses offered at Florida Tech.
- Online teaching experience using Zoom / Google hangouts

### Department of Mathematical Sciences

- *Graduate Student Assistant (GSA)*, August 2019 – Present
- Responsibilities included:
  - Held weekly laboratory classes for problem solving
  - Graded course materials (ie. quizzes, projects, exams)
  - Proctored Exams
  - Held office hours for 3 hours for each course taught every week in M.A.C.
- Courses Taught:
  - General Precalculus
  - Single Variable Calculus 1
  - Differential Equations
  - Linear Algebra
- Have been a GSA for fall, spring, and summer courses

## Awards

### Nominated for SGCI Young Professional Award Summer 2020

- Nominated by SIMIODE & SCUDEM

### Department of Mathematics Research Award, Florida Southern College, Spring 2019

- Awarded to a student displaying mastery of, as well as a great curiosity about independent research

### Dean's Scholar, Spring 2019

- Awarded to students taking 16 or more credit hours and finishing with an average GPA of at least 3.5

### Alpha Gamma Rho Distinguished Scholar, Spring 2019

- Awarded to two members who display outstanding scholarship, \$200

### SCUDEM II Differential Equations Modeling Competition Meritorious Distinction, Spring 2018

- Award of highest distinction granted to the team whose differential equation best modeled the given "predator-prey" problem
- Competition included submission of a written executive summary, as well as an oral presentation, detailing our work

## Scholarships

**Graduate Student Assistantship, Florida Institute of Technology, Summer 2019**

- \$11,169/semester for graduate tuition

**Scholar Residency Grant, Florida Southern College, Spring 2017**

- \$2,000/semester

**Ronald Regan Presidential Scholarship - General Electric, Spring 2015**

- \$40,000

**Watson Scholarship, Florida Southern College, Spring 2015**

- \$52,000

## Research

**Mathematical Physics and Applied Mathematics, Florida Institute of Technology – Dr. Aaron Welters, Spring 2020 - Present**

- Realization theory for rational functions of several complex variables applied in composite theory

**Differential Equations Modeling, Florida Southern College – Dr. Jason Elsinger  
Spring 2018 - Spring 2019**

- Mathematical Modeling of a natural phenomenon in Predator-Prey Relations using ordinary differential equations

**Small World Initiative, Florida Southern College**

- Project with Yale University for antibiotic resistance in bacteria; authentic research on antibiotics produced by common soil microorganisms; needed a specific set of core biotechnology courses, which include Biological Essentials, Microbiology, Genetics, and research experience

## Leadership and Involvement

**SGCI Intern: Summer 2020** [http://nia.ecsu.edu/sgci/sgci\\_internships/2020/researchers.html](http://nia.ecsu.edu/sgci/sgci_internships/2020/researchers.html)

SCUDEM & SIMIODE Assigned <https://www.simiode.org/>

- Prepared for SCUDEM Differential Equations Modeling Competition for Fall 2020
- Organized Differential Equations Modeling activities for SIMIODE website
- Provided student feedback for online Differential equations textbook

**SCUDEM: Differential Equations Modeling** <https://www.simiode.org/scudem>

- Site Host at Florida Tech, *Organizer*, Nov. 9, 2019
- *Coach*, guided a F.I.T. team to prepare them for competition, Nov. 9 2019
- *Student Judge*, November 9, 2019
- *Student Competitor*, April 23, 2018

**Society for Industrial and Applied Mathematics**

- *Elected President*, Fall 2019-present
- Constructed bylaws for reformation of organization recognized by campus SGA

**Department of Mathematics Showcase**

- Chosen Student to showcase the FSC math department to prospective students, 2018

**Alpha Gamma Rho, Social Fraternity**

- *PR*, Spring 2016 – Winter 2017
- *Scholarship Executive*, Spring 2017 - Winter 2019

**Kappa Mu Epsilon, Mathematics Honor Society**

- *Member*, Spring 2019 – present

**LTAP Alumni**

- D.C. Experience: Leadership and the American Presidencies at GWU, Summer 2017

**GE- Leadership Summit**

- Attendee, Summer 2016

## Presentations

### Florida Tech

- *AMS Invited Speaker, Fall 2019*
- “Alarm Bells and SCUDEM”

### Aspire 2019

- *Knots and Primes, Spring 2019*
- “Understanding a relationship between mathematical knots and prime numbers”

### Florida Southern College

- *Research Presentation, Spring 2019*
- “Meandering Knot Permutation”

### Joint Mathematics Meeting of the American Mathematical Society and Mathematical Association of America

- *Invited Speaker, Baltimore, MA, Jan. 18, 2019*
- AMS Special Session on Using Modeling to Motivate the Study of Differential Equations, II
- “Using Differential Equations to Model Predator-Prey Relations as Part of SCUDEM Modeling Competition”

### Fiat Lux at Florida Southern College

- *Oral Presentation, Spring 2019*
- Senior Mathematics Capstone: “Differential Equations Beyond the Classroom”

### Florida Gulf Coast University

- *Invited Speaker, Differential Equations, Spring 2019*
- “SCUDEM and D.E. Modeling”

## Publications

- Fralish, Zachary; Tyson, Bernard III; and Stefan, Anthony "Using Differential Equations to Model Predator-Prey Relations as Part of SCUDEM Modeling Challenge," *Rose-Hulman Undergraduate Mathematics Journal*: Vol. 20 : Iss. 2 , Article 7.  
<https://scholar.rose-hulman.edu/rhumj/vol20/iss2/7/> (2020)
- SIMIODE website publication a systematic guide for modeling problems in differential equations <https://www.simiode.org/resources/7978> (2020)
- SIMIODE website publication a guide for writing mathematics in LaTeX  
<https://www.simiode.org/resources/7825> (2020)

## Patents

- “[Multifunction Towel Drying Device],” U.S. Provisional Pat. Ser. No. 62/914,099, filed [11-Oct-2019].