# Kaitlin R Maciejewski

katemac68@gmail.com • 203 763 9314 • 68 Sunset Circle, Fairfield, CT 06824

#### **EDUCATION**

Columbia University

New York, NY

Masters of Science: Biostatistics

May 2019

Fairfield University

Fairfield, CT

Bachelor of Science: Mathematics • Minor: Engineering

May 2015

GPA: 3.61 • Cum Laude

#### EXPERIENCE

# Mathnasium - The Math Learning Center

Fairfield, CT

Center Director, Math Instructor

September 2015 - August 2017

- Utilized quantitative skills, communication, creativity, and Mathnasium Method to instruct students ages 5-18 years
- Conducted student assessments to determine understanding over memorization; created and monitored individualized learning plans to support students' needs; reviewed students' progress with parents
- Updated websites for three centers; Included topical articles, instructor bios, and center information
- Organized and advertised monthly calendar of events, including game day and STEM night to benefit
  and entertain students and community

#### **Hubbell Incorporated**

Shelton, CT

Summer Intern, Product Support Engineering, Phil Burdo

May - August 2014

- Used company database, Excel spreadsheets, and XRF analysis machine to certify product compliance with RoHS and REACH environmental safety standards; completed 300% more requests than average weekly rate
- Coordinated with team of interns to create and distribute surveys, brainstorm ideas, and communicate findings to design company-wide new product development training materials

#### Fairfield University

Fairfield, CT

ReBound Technology, Research Assistant in Thermal Design Optimization

January 2014 - May 2014

- Printed 3D coupons with SolidWorks software and Objet Eden printer; investigated efficient cleaning methods for internal parts of 3D-printed pieces
- Created code in EES to solve equations to assist in design and model of heat exchanger for application in refrigeration technology

Fairfield University Society of Women Engineers, President

June 2014 - May 2015

Co-Founder, Treasurer

January 2013 - June 2014

- Organized budget, activities, and schedule for first annual "Engineering is SWEet" day for 40 local Girl Scouts
- Created budget and coordinated funding for club activities; annually funded 5 members' regional conference attendance

## University of Connecticut, Center for Clean Energy Engineering

Storrs, CT

Summer Research Assistant, NSF REU Program, Professor Alexander Agrico

May - August 2013

- Conducted original experiments to explore chemical combinations and technique to create thin aerogel films for applications on solar cells
- Created Excel spreadsheet to organize variables tested and assist in identification of trends
- Presented and reported findings to lab group and program participants on bi-weekly basis

#### Publication

Rua, Y., Maciejewski, K., Muren, R., Reckinger, S. M., (2014). Relationship Between the pH of Sodium Hydroxide Solution and 3D Printed Support Resin Dissolution. Zone 1 Conference, American Society for Engineering Education.

# **PROJECTS**

Fairfield University Fairfield, CT

Applied Statistical Methods; Inquiry into School Districts in CT

December 2015

- Designed study questions to research differences between school districts in CT
- Used RStudio to run appropriate tests on data and completed report about findings

Capstone Project; Overview of Einstein's General Relativity

May 2015

- Investigated Einstein's field equation in 2-dimensions; modeled behavior of test particle in presence of massive object using MATLAB software
- Reported historical background and significance of relativity in capstone paper and presented findings at Fairfield University's Sigma Xi poster presentation

Water Chlorinator, Unidad Académica Campesina-Carmen Pampa, Bolivia

August 2014

- Constructed water chlorination system to serve college campus and local community in Bolivia, about 600 people
- Surveyed land to assist in planning and designing of additional chlorination and sand filtration systems

## POSTERS AND PRESENTATIONS

Capstone Project; Overview of Einstein's General Relativity
Fairfield University Sigma Xi Student Research Poster Session, 2015

Relationship Between the pH of Sodium Hydroxide Solution and 3D Printed Support Resin Dissolution Fairfield University Sigma Xi Student Research Poster Session, 2014

Fairfield University Engineers without Borders Water Chlorinator Project at Unidad Académica Campesina-Carmen Pampa, Bolivia

Fairfield University Sigma Xi Student Research Poster Session, 2014

Relationship Between the pH of Sodium Hydroxide Solution and 3D Printed Support Resin Dissolution Zone 1 Conference, American Society for Engineering Education, 2014

Relationship Between the pH of Sodium Hydroxide Solution and 3D Printed Support Resin Dissolution Fairfield University Math Department Colloquium, 2014

Relationship Between the pH of Sodium Hydroxide Solution and 3D Printed Support Resin Dissolution Society of Women Engineers Region F 2014 Conference Poster Session, 2014

# Honors and Awards

| Huo Foundation Scholarship  | 2017      |
|---|-----------|
| Fairfield University Honor's Program, completed with High Distinction               | 2015      |
| Fairfield University Dean's List  | 2102-2015 |
| Pi Mu Epsilon, National Mathematics Honor Society                                   | 2015      |
| Honorable Mention, Zone 1 Conference, American Society for Engineering Education    | 2014      |
| 2nd Place in Society of Women Engineers Region F 2014 Conference Poster Competition | 2014      |
| National Society of Collegiate Scholars   | 2013      |
| Tau Beta Phi, Fairfield University Engineering Honor Society                        | 2013      |
| Fairfield University School of Engineering Bernadette and John Porter Scholarship   | 2013      |
| John G Phelan Scholarship for Engineering Excellence                                | 2013      |
|   |           |

## Computer Skills

R Studio, MATLAB, EES, SolidWorks, LATEX, Microsoft Office, Mac OS, Windows OS

## LANGUAGE SKILLS

Native English speaker; Conversational Spanish speaker