

# KAITLIN R MACIEJEWSKI

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## EDUCATION

### Columbia University Mailman School of Public Health

Master of Science: Biostatistics, Theories and Methods

New York, NY

### Fairfield University

Bachelor of Science: Mathematics • Minor: Engineering

Cum Laude • Honors Program • Thesis: Overview of Einstein's General Relativity

May 2019

Fairfield, CT

May 2015

## SKILLS

*Computer Skills:* RStudio, GitHub, MATLAB, SQL, Tableau, LaTeX, beginner Python, beginner SAS

*Language Skills:* English, Spanish (conversational)

## BIOSTATISTICS EXPERIENCE

### NYC Department of Health and Mental Hygiene

H RTP intern, Office of Informatics and Research

New York, NY

November 2018 - Present

- Data wrangling and geocoding in Tableau, SQL, RStudio to expand upon dashboard of data pertaining to call locations of emotionally disturbed persons in NYC
- Create efficient processes for databases in SQL server including real-time FDNY emergency response data, and population estimates from the American Community Survey
- Analysis of survey data for thesis project report and poster; generate planning documents and codebook; data management in SAS and SAS-callable SUDAAN
- Prepare tutorials in Geocoding in R and creating Shiny dashboards in R for colleagues
- Learn about data management and engage in best practices, including creating appropriate documentation
- Effectively work as part of a cross-disciplinary team to define and clarify analytic requirements, develop an analysis plan, ensure data quality, and design ready-to-use presentation materials

### Columbia University

Robotics Clinic, Burke Neurological Institute and Weill Cornell Medicine

New York, NY

May 2018 - June 2018

- Investigated data from robotic training for stroke patients related to Fugl-Meyer UE score (FM) and clinical predictors
- Visualized patient outcomes using spaghetti plots and linear models, in RStudio, to show relationships between covariates at baseline and FM change

## ADDITIONAL EXPERIENCE

### Columbia University

Graduate Teaching Assistant

New York, NY

September 2018 - December 2018

- Teaching Assistant for Introduction to Biostatistic Methods, online course, of over 50 students from a range of academic backgrounds
- Graded assignments, kept professor up-to-date regarding course progress
- Furthered students' understanding of assignments and course content during 2-hour weekly TA sessions
- Organized workshop to help students grasp use of R software and course content

### Fairfield University

ReBound Technology, Research Assistant in Thermal Design Optimization

Fairfield, CT

January 2014 - May 2014

- Created code in EES to solve equations to assist in design and model of heat exchanger for refrigeration technology
- Contributed to published research on 3D manufacturing process and efficient cleaning methods for internal parts of 3D-printed pieces

*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

**Mathnasium - The Math Learning Center****Fairfield, CT***Center Director, Math Instructor*

September 2015 - August 2017

- Managed, supervised, and trained staff of 12 instructors
- Instructed 60 students monthly, ages 5-18 years, increased grades and test scores
- Created individualized learning plans to support students' needs; wrote monthly progress reports to inform parents of progress

**Hubbell Incorporated****Shelton, CT***Summer Intern, Product Support Engineering*

May 2014 - August 2014

- Certified product compliance with stringent environmental safety standards while ensuring adherence to protocol
- 300% more efficient in completing requests than weekly average
- Trained self on XRF analysis machine and performed analysis on entire backlog of materials
- Coordinated team of interns to create and distribute surveys, brainstorm ideas, and communicate findings to design company-wide new product development training materials

**University of Connecticut, Center for Clean Energy Engineering****Storrs, CT***Summer Research Assistant, NSF REU Program, Professor Alexander Agrios*

May 2013 - August 2013

- Conducted original experiments to explore chemical combinations and techniques 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**


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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.

**POSTERS AND PRESENTATIONS**


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The relationship between depression and sociodemographic and economic characteristics in New York City adults 2016 – 2017

— *Columbia University Mailman School of Public Health Student Practicum Poster Session, 2019*

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*

— *Zone 1 Conference, American Society for Engineering Education, 2014*

— *Fairfield University Math Department Colloquium, 2014*

— *Society of Women Engineers Region F 2014 Conference 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*

**HONORS AND AWARDS**


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Huo Foundation Scholarship	2017 - 2019
Fairfield University Honor's Program, completed with High Distinction	2015
Fairfield University Dean's List	2012 - 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