

Madhavi Rajiv

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Education

Duke University, Durham, North Carolina
Bachelor of Science in Electrical and Computer Engineering (Concentration in Signal Processing)
Graduated May 2019 with Departmental Distinction GPA : 3.91/4.0

University of Southern California, Los Angeles, California
PhD Program in Electrical and Computer Engineering (2019- now)
GPA : 4.0/4.0

Experience

Research in Professor Urbashi Mitra's Lab (September 2019 – now)

- Working on blind channel estimation

Writing Consultant at the Duke Thompson Writing Center (August 2018 – May 2019)

- Provide consultation services for student writers of all backgrounds and levels, including graduate students
- Work with students on research papers, application essays, and any other writing assignments they may have

Teaching Assistant for Fundamentals of Digital Signal Processing (August 2018 – December 2018)

- Hold office hours in order to help students understand concepts and problem solving techniques
- Grade homework assignments

Pratt Fellows Research Program in the lab of Dr. Leslie Collins (January 2017– May 2019)

- Worked on attenuating cochlear implant artifact in EEG recordings
- Used EEGLAB, a MATLAB toolbox, in order to analyze and process EEG recordings

Summer Research Internship at UC, San Diego in the lab of Dr. Juan Carlos del Alamo (May – August 2017)

- Presented research at UCSD Undergraduate Summer Research Conference
- Implemented machine learning clustering algorithms in order to distinguish between healthy hearts and hearts suffering from dilated cardiomyopathy

Embedded Writing Consultant for Duke class on Engineering Design and Communication (September 2017 – December 2017)

- Consult student design teams on writing technical memos documenting their design process
- Work with professors to determine strategies to improve student writing

Scientific Social Network Analysis Project – Bass Connections (Fall Semester 2016)

- Wrote R scripts differentiating authors with the same name by using metadata from their papers

Teaching Assistant for Computational Methods in Engineering at Duke University (Fall Semester 2016)

- Tutored students on the use of MATLAB for data analysis

Environmental Engineering Project in Honduras for Duke Engineers for International Development (May – July 2016)

- Worked with a 10 person team to design a water filtration system throughout a town in Honduras
- Built out the system while shifting the design to accommodate environmental variables

Honors/Awards

USC Annenberg Graduate Fellowship (2019)

Duke Charles Ernest Seager Memorial Award (2019)

- Recognizes outstanding undergraduate research projects and presentations

Skills

Java, MATLAB, Intermediate Spanish, Software Design, Written Communication