

ROHIT KONDA

Goleta, California, 93117
+678 549 1410 ◊ rtkonda@gmail.com

EDUCATION

B.S in Biomedical Engineering	2015 - 2018
Georgia Institute of Technology	GPA: 3.85/4.00
M.S in Electrical and Computer of Engineering	2019
Georgia Institute of Technology	GPA: 4.00/4.00
Technical Interests in Digital Signal Processing	
Ph.D. in Electrical and Computer Engineering	2019-Present
University of California, Santa Barbara	GPA: -/-
Emphasis in Communications, Control & Signal Processing	

HONORS AND SKILLS

Honors	Regents Fellow in Electrical and Computer Engineering	2019
	Computational Neuroscience Training Grant Recipient	2017
	PURA Travel Scholarship Recipient	2017
	National Merit Scholar Recipient	2014
Languages	Python, MATLAB, Linux, LATEX, GitHub, ROS	
Interests	Nonlinear Control Theory, Optimization, Formal Verification, Autonomy	

RESEARCH PROJECTS

Quantization of Information in Game Theory	2019 - Present
Dr. Jason Marden: jrmarden@ece.ucsb.edu	UC Santa Barbara

- Worked on game theoretic problems

Safety Critical Control with Applications in Autonomy	2018 - 2019
Dr. Samuel Coogan: sam.coogan@gatech.edu	Georgia Tech

- Graduate Research Assistant working on invariance certification through viability methods
- Researched control methods for safe autonomous navigation through roundabout intersections
- Constructed an autonomous vehicle platform with LIDAR running ROS for physical testing
https://github.com/gatech/factslab/GT_AutonomousCar
- Developed a Python software package for robotic simulation
<https://github.com/gatech/factslab/systemcontrol>

Network and Dynamical Systems Approach to Brain Stimulation	2016 - 2018
Dr. Vineet Tiruvadi: vineet.tiruvadi@gatech.edu	
Dr. Robert Butera: rbutera@gatech.edu	Georgia Tech

- Worked on problems with system identification and optimal control of dynamical network models
- Implemented and studied various computational models, including Kuramoto, Wilson Cowan, and NMM

Wet Lab Experimentation of Deep Vagus Block Stimulation in Rats	2016
Dr. Yogi Patel: yapatel@gatech.edu	
Dr. Robert Butera: rbutera@gatech.edu	Georgia Tech

- Performed animal model experiments to test effectiveness of various electrodes
- Received CITI Training, and IACUC Training for Rat experimentation

EEG Emotion Prediction for Musical Robotic Performance	2016
Dr. Mike Winters: mikewinters@gatech.edu	
Dr. Gil Weinberg: gilw@gatech.edu	Georgia Tech

- For more info: <http://www.cnet.com/news/robotic-arm-turns-drummer-into-three-armed-musical-cyborg/>

- Collaborated with a team to create an EEG-based musical feature generator, which would be implemented in a musical robotic arm to improvise in real-time with a drummer

Bioinformatics Pipeline for HPV classification

2015

Dr. Mark Borodovsky: borodovsky@gatech.edu

Georgia Tech

- Developed bioinformatics pipeline for mapping different DNA reads to different HPV types in conjugation with the CDC and their Next-Generation Sequencing tool.

Biochemical Analysis for Phenotypes of Prions in Yeast

2013, 2014

Dr. Kathryn Bruce: klynbruce@gmail.com

Dr. Yury Chernoff: yury.chernoff@biology.gatech.edu

Georgia Tech

- Explored phenotypes of yeast prions using cell techniques such as PCR, Gel Electrophoresis and Culturing.

PUBLICATIONS

Rohit Konda, Eric Squires, Dr. Pietro Pierpaoli, Dr. Magnus Egerstedt, and Dr. Samuel Coogan, “Provably-Safe Autonomous Navigation of Traffic Circles” *CCTA 2019*, to appear

Rohit Konda, Dr. Aaron D. Ames, and Dr. Samuel Coogan, “Characterizing Safety: Minimal Barrier Functions from Scalar Comparison Systems” , *arxiv*, in submission

WORK EXPERIENCE

Teaching Assistant

2017

BME 3110, BME 3520

Georgia Tech

- Lab Assistant for BME 3110: Quantitative Lab, Grader for BME 3520: Systems Modeling