



School of Electrical and  
Computer Engineering  
College of Engineering  
UNIVERSITY OF GEORGIA



# THE WAVE LAB: PHOTONICS & SOFT ROBOTICS

The Lightwave and Microwave Photonic Lab (WAVE Lab) strives to bring fiber optics and photonics techniques to inter-disciplinary areas. Our current research interest includes soft robotics, fiber optic sensing, bio-inspired and microwave photonics. Projects undergone in the lab include mimicking the behavior of living organisms using light, using hair-thin optical fiber based sensors within soft robots and for below-ground sensing, and constructing bio-inspired soft robots that provide a safe means of actuation.

Our group is dedicated to the advancement of science and engineering through cutting-edge innovation in research. We are looking for highly motivated individuals to join our supportive and collaborative research environment. The WAVE lab is an ideal choice for those looking to advance their careers and make a meaningful impact in research.



**1** of our soft robotic projects was highlighted on a Dutch Radio program as well as a number of online media

**2** IEEE Photonics Society Magazine highlighted two of our research studies on bio-inspired photonics

**5** our research has resulted in five awarded patents

## GRADUATE OPPORTUNITIES

The WAVE lab offers excellent research facilities and resources for graduate students interested in the fields of photonics, soft robotics, and optical sensing. The WAVE Lab is seeking talented and motivated students interested in graduate level (Ph.D. or M.S.) research and contributing to groundbreaking innovations in emerging research fields.

## DOUBLE DAWG® BS-MS POSITIONS

The WAVE Lab is experienced in guiding and mentoring undergraduate students who are interested in pursuing a master's degree. Our lab offers a dynamic and inclusive environment for students to develop the skills needed to achieve their career goals.

## UNDERGRADUATE OPPORTUNITIES

The WAVE Lab is seeking motivated and enthusiastic undergraduate students to join our research team. Research in the WAVE Lab is fun no matter if you are pursuing a research career, or simply looking for research experience. Students have the opportunity to gain hands-on experience in cutting-edge research and technologies.

"In WAVE Lab, we have both undergrad and graduate students, giving a balanced environment to work and have fun!"

-Irin Bristy,  
Ph.D. student in the WAVE lab



LEARN MORE: [WAVE.ENGR.UGA.EDU](http://WAVE.ENGR.UGA.EDU)



WAVElabUGA



wavelabuga



lab\_wave



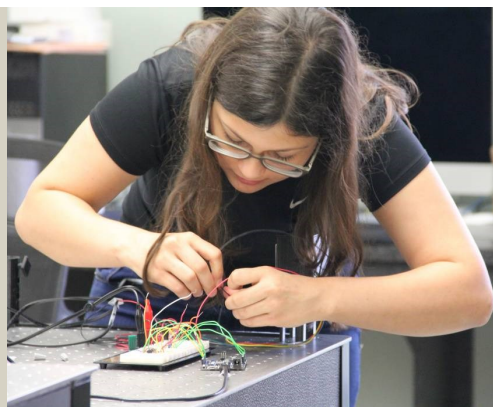
# TESTIMONIALS FROM THE **WAVE** Lab

*committed to research for a productive future*



**DR. MABLE FOK** recipient of numerous honors, including:

- 2022 Excellence in Research, UGA College of Engineering
- 2019 Creative Research Medal in Natural Sciences and Engineering
- 2017 National Science Foundation CAREER Award
- 2016 University of Georgia CURO Research Mentoring Award
- 2015 Excellence in Research, UGA College of Engineering
- 2014 Ralph E. Powe Junior Faculty Enhancement Award
- 2010 IEEE Photonics Society Graduate Student Fellowship

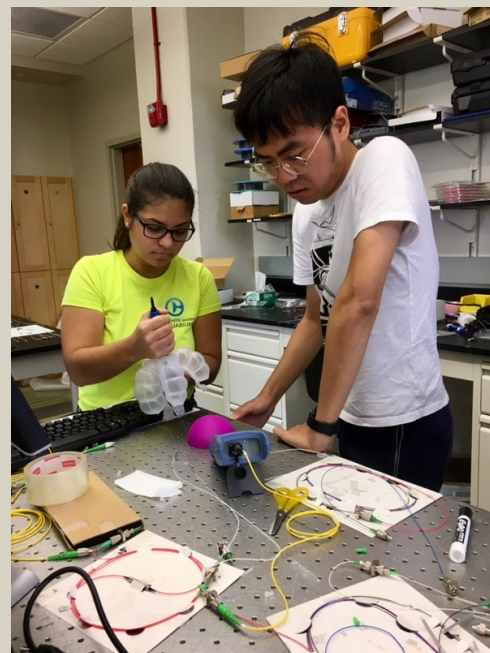


*“Dr. Fok interacts with her students as peers, holding them to a high standard while treating them respectfully as professionals.”*

– Ryan Toole (Master of Science, Alumna)



*“Researching in the Wave Lab provides a fun and rigorous experience for all its members. Dr. Fok is always seeking new innovations in Microwave Photonics and Soft Robotics, and I believe this strive for innovation is the perfect catalyst for motivation in research. It is refreshing to be a part of a group of such like-minded and driven students.”* – Ben Gily (Undergrad Double Dawg)



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