# Fully-Funded M.S. and Ph.D. Students in Robotics & Control

#### **Open Positions:**

Applications are open immediately for fully-funded M.S. and Ph.D. students at the **Department of Mechanical Engineering** within the **University of Louisiana at Lafayette**, matriculating in **Fall 2025** /**Spring 2026**. The successful candidates are expected to work on novel planning and control methods for diverse robotic applications (e.g., UAVs, UGVs, ASVs, and robotic arms) using theoretical, computational, and experimental approaches. An overview of some previous research projects can be found at <u>https://boyangzhangphd.github.io/research/</u>.

#### **Desired Qualifications:**

- Bachelor's degree in mechanical engineering, electrical and computer engineering, computer science, or a closely related field;
- Master's degree in mechanical engineering, electrical and computer engineering, computer science, or a closely related field, **preferred for Ph.D. applicants**;
- Prior experience in robotics, automation, optimization, and/or control theory;
- Prior publications in major robotics & control journals/conferences is a big plus;
- Solid mathematical analysis skills;
- Excellent programming skills in at least one of the following: Matlab, C/C++, Fortran, Python;
- Experience with robotic hardware implementation;
- Highly self-motivated, perseverant, and has excellent communication skills.

#### How to Apply:

Interested applicants should send an email to <u>boyang.zhang@louisiana.edu</u> with **1)** a CV, **2)** a statement on past/present/future research, **3)** prior transcripts, and **4)** the contact info for 3 academic references.

#### About Me:

Dr. Boyang Zhang is an assistant professor of mechanical engineering at the University of Louisiana at Lafayette. He earned a **Ph.D.** and an **M.S.** degree from Duke University. Prior to Duke, he earned an **M.Eng.** degree (with highest distinction) from Memorial University and a **B.Eng.** degree from Tianjin University. His research has been published in top venues in control and optimization, including IEEE-TAC (full paper), IEEE/CAA JAS, IEEE-CDC, and ACC. Dr. Zhang is the recipient of numerous awards, including the **Duke University Graduate/Professional Academic Exemplar of the Year**, the Southeast Control Conference Best Presentation Award, the Bass Instructional Fellowship, and the Senol Utku Annual Award. More information can be found at <u>https://boyangzhangphd.github.io</u>.

## About the University:

The **University of Louisiana at Lafayette** (UL Lafayette) is a public research university in Lafayette, Louisiana, USA. Founded in 1898, it has the largest enrollment (over 19,000 students) within the ninecampus University of Louisiana System and the second-largest enrollment in Louisiana. UL Lafayette is classified as an **R1 University** – "Doctoral University - Very High Research Activity" (<u>in total 146 US</u> <u>institutions are R1 as of 2021</u>). UL Lafayette is ranked as the **4**<sup>th</sup> fastest growing research universities in the US over the past decade and the **3**<sup>rd</sup> in the nation for industry-funded research according to the National Science Foundation (**NSF**). The University has 16 varsity teams competing in **NCAA Division I**, with the Water Ski Team finished no lower than third place at any national championships since 1993.

## About the College and Department:

The **College of Engineering** has over 1700 students as of Fall 2023, and offers B.S., M.S., and Ph.D. degrees in all engineering departments. The **Department of Mechanical Engineering** is the largest among six departments in the College, with primary research areas in robotics, manufacturing, renewable energy, materials, and biomedical engineering. Annual research expenditures in the ME Department average between \$3M to \$4M per year, with current external research projects of over \$15M.

## About the City of Lafayette:

Named "**The Hub City**" and "**The Heart of Cajun Country**", Lafayette is an exciting community within Louisiana, the only US state that cherishes French heritage. Lafayette is highly technology-oriented and has a reputation for being a community in which people are prone to remain due to the high-quality lifestyle, pleasing climate, and friendly nature of its people. The city of over 130,000 is part of the Lafayette-Acadiana area, which has a total population of over 625,000 and is one of Louisiana's fastestgrowing metropolitan areas. Lafayette serves as the energy, financial, retail, and medical center for South-Central Louisiana and is the largest population and economic center of the corridor between Houston (3-hour drive) and New Orleans (2-hour drive).