



SCHOOL OF ENGINEERING AND COMPUTER SCIENCE
OAKLAND UNIVERSITY

DR. MICHO RADOVNIKOVICH

Dr. Micho Radovnikovich is Lead Algorithm Developer at Dataspeed, Inc. in Rochester Hills, MI. He leads research and development efforts to create sensing and control software in the autonomous vehicles space for both internal projects and engineering services projects from Dataspeed's clients. These clients include companies in both the automotive and defense industries, as well as academia. Micho is also a part-time lecturer at Oakland University in the Electrical and Computer Engineering department, where he teaches two graduate-level courses: ECE 5532 – Autonomous Vehicle Systems I, and ECE 6460 – Autonomous Vehicle Systems II. ECE 5532 focuses on the software development of mobile robotics and ECE 6460 focuses on autonomous passenger vehicles.

Micho completed his B.S. in Electrical Engineering, M.S. in Systems Engineering, and Ph.D. in Systems Engineering all from Oakland University, studying under Dr. Ka C. Cheok for his graduate programs. Over the years since completing his Ph.D. in 2014, Micho designed and taught the two courses mentioned above, ECE 5532 and ECE 6460, to provide students with hands-on experience learning about how robotics software is developed in the industry.



SECS EXCELLENCE IN TEACHING SEMINAR

MARCH 24TH, 12:00–1:00 PM
ENGINEERING CENTER 550

This presentation focuses on the curriculum of the Autonomous Vehicle Systems I and II courses, which is drawn from knowledge, skills, and techniques Micho uses daily at Dataspeed. The courses are designed to give the student a solid foundation to build from in future research or employment opportunities. In addition to the engineering concepts, assignments are meant to further expose students to industrial best practices.

Students submit their assignments using the Git version control system, and the assignment repositories are hosted on GitHub. Instructor feedback and grading are done through GitHub pull requests, and the software modules implemented in the assignments are validated using continuous integration (CI) scripts that are similar to how companies test candidate software releases.

The presentation also shows how YouTube playlists and video chapters are used to make easily browsable lecture videos. Discord is used as an effective means of communication between students and the instructor, and has features that make it easy to announce the release of new videos, assignments, and updates to the example codebase. Finally, a selection of projects from semesters past are presented.



Meeting ID: 971 2003 7612
Passcode: 478700