ALEXIS GUIJARRO

>>> Summary

I am a Computer Scientist (M.Sc.) who specializes on robotics, multi-agent systems, computer vision and control systems. Part of my background is built around my Bachelor degree on Mechatronics engineering, where I've been exploring and experimenting with robots, UAVs, sensors, actuators, among other elements, to solve engineering problems.

Currently I am working at New Mexico State University in research of proof of concept of control strategies on robots and autonomous vehicles, relying on commercial and open source elements. All while studying my PhD in Electical Engineering.

> Status: PhD Student in Electrical Engineering and

Robotics Researcher

> Fields: Software Development, Robotics, Control Systems, Unmanned Aircraft Systems, Com-

puter Vision

▶ Tech: Linux, Ubuntu, Git, C/C++, Java, C#, Python, ROS, OpenCV, MCUs, Vicon, LabVIEW, △TEX

▶ Lang: Spanish (Native), English (Proficient) and

French (Basics)

Education

Aug 2018 / Aug 2020 - Texas A&M University - Corpus Christi

Graduated as M.Sc. in Computer Science

- ➤ Master Thesis: "A mixed reality testbed for design and validation of estimation and control strategies for unmanned systems research"
- Developed and evaluated a mixed reality environment for testing control strategies on unmanned systems

Aug 2013 / Jan 2018 - Universidad La Salle Laguna

Bachelor Studies in Mechatronics and process control systems engineering

- ▶ Concepts of Mechatronics Engineering and process automation
- ▶ Bachelor thesis: "Monitoring and Analysis of Vehicle Traffic using Image Processing"

>>> TEACHING

Fall 2019 - Texas A&M University - Corpus Christi **Adjunct Faculty**

■ COCC 1220 Drogram

- ➤ COSC 1330 Programming for Scientists, Engineers, and Mathematicians
- Introductory class for entry-level programming

Fall 2018 - Texas A&M University - Corpus Christi

Teaching Assistant

- ▶ ENGR 2460 Circuit Analysis I / ENTC 2414 Circuit Analysis I
- ▶ Lab grader and assistant for electric circuit analysis

>>> Professional Experience

Aug 2018 / Aug 2020 - Texas A&MUniversity Corpus Christi

Research Assistant

- ➤ Control systems experiments and proof of concept on autonomous vehicles
- Design experiments and vehicles for creation and evaluation of control strategies on autonomous vehicles

Winter 2017 - Ases Laguna

Engineering Intern

- Automation of industrial processes for veterinarygrade serum
- ▶ Integrated the initial stages of automation for veterinary-grade serum packaging and transportation

Aug 2016 / May 2018 - DroneLaguna

Programming and assembly instructor of drones

- Instructed universities and private consumers the assembly and programming of open source drone platforms
- ➤ Taught basic concepts for unmanned aircraft systems and provided guidance to academia and corporate staff

>>> Contact and social media

Phone: (US) 575 805 4493 | (MX) +52 871 457 9164

▶ Email: totonzx@gmail.com

→ GitHub: TOTON95 **→ Twitter:** alexis.guijarro