INGRID NAVARRO

🔗 navarrs.github.io   ⬡ github.com/navarrs   in linkedin.com/in/ingridnavarroan

WORK EXPERIENCE

Robotics Software Engineer
Stealth Mode Startup

📅 Dic 2019 – Aug 2019

- Implementation of a collision detection framework for a robot manipulator.
- Worked with algorithms and simulations for Hand-Eye calibration and point cloud acquisition and analysis.

Computer Vision Engineer
X-LAB Protexa R&D

📅 Dic 2018 – July 2019

Project 1: Prototyped a visual inspection system to find and classify paint defects on car components using Deep Learning models.

Project 2: Research and development of the computer vision software for an autonomous warehouse robot using ROS.

Computer Vision Intern
Carbon Robotics

📅 July 2019 – September 2019

- Design of a scheme to evaluate the accuracy of a camera calibration system using a motion tracking system and image plane detection techniques.

RESEARCH

Robotics Institute Summer Scholar
Carnegie Mellon University

📅 June 2018 – Aug 2018   📍 USA

Research on semantic segmentation of 3D point clouds from low-end sensors using Deep Learning and plane-fitting techniques.

Robotics Institute Summer Scholar
Carnegie Mellon University

📅 June 2017 – Aug 2017   📍 USA

Research on Deep Learning-based object detection systems to perform wheelchair detection in cluttered environments.

MAIN PROJECTS

Perception System of Autonomous Boat
Tecnológico de Monterrey

📅 Jan 2018 – May 2019   📍 México

Lead the research and development of the vision system of an autonomous boat that was built for the International RoboBoat Competition hosted by RoboNation.

- Used Deep Learning to perform obstacle detection on the water.
- Used Computer Vision algorithms in OpenCV to perform object tracking and path planning.

Smart Jacket
Omius Robotic Clothing and Tecnológico de Monterrey

📅 Dic 2016 – May 2017   📍 México

Participated in the design of a jacket that helps regulate body temperature based on the physical activity of a person and the environment conditions.

EDUCATION

B.S. in Digital Systems
Tecnológico de Monterrey, México

📅 Aug 2014 – May 2019

Computer Engineering Exchange Student
École Polytechnique de Montréal, Canada

📅 Aug 2017 – Dic 2017

CERTIFICATIONS

Robotics Software Engineer
Udacity Nanodegree (April 2020)

Neural Networks
DeepLearning.ai at Coursera (Jan 2018)

Machine Learning
Stanford at Coursera (Oct 2017)

ACHIEVEMENTS

🏆 **Top student of the School of Engineering**
Tecnológico de Monterrey (Apr 2018)

🏆 **RoboCup Platform Soccer League Competition, 1st place.**
Mexican Robotics Tournament (Mar 2018)

🏆 **Emerging Leaders in the Americas Program (ELAP) Scholarship Recipient**
Government of Canada (Aug 2017)

🏆 **Hackathon MTY, Junior Category, 1st Place**
Major League Hacking (Mar 2016)

TECHNICAL SKILLS

C / C++   Python

OpenCV   VTK   ROS   Tensorflow

Keras   Protobuf   OpenRAVE

Git   Bitbucket   Jira

Ubuntu   Windows

LANGUAGES

Spanish   French   English

INTERESTS

Robotics   Computer Vision

Deep Learning   Machine Learning

Operating Systems