

Víctor Massagué Respal

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EDUCATION

INNOPOLIS UNIVERSITY | MASTER IN ROBOTICS

Aug. 2018 - Expected June 2020 | Innopolis, Russia

INNOPOLIS UNIVERSITY | EXCHANGE PROGRAM - BACHELOR IN COMPUTER SCIENCE

Aug. 2017 - Jun. 2018 | Innopolis, Russia

POLYTECHNIC UNIVERSITY OF CATALONIA | BACHELOR IN COMPUTER SCIENCE - COMPUTING SPECIALIZATION

Sept. 2014 - Jun. 2018 | Barcelona, Spain

PUBLICATIONS

THESIS

- Víctor Massagué Respal. **"Quoridor agent using Monte Carlo Tree Search."** Bachelor's thesis, Universitat Politècnica de Catalunya, 2018. [pdf | Github]

PREPRINT

- Víctor Massagué Respal, Dmitry Devitt, and Roman Fedorenko. **"Unmanned Aerial Vehicle Path Planning for Exploration Mapping."**, 2020. [pdf | video]

CONFERENCE

- Víctor Massagué Respal, Sami Sellami, and Ilya Afanasyev. **"Implementation of Autonomous Visual Detection, Tracking and Landing for AR. Drone 2.0 Quadcopter."** In The 12th International Conference on the Developments in eSystems Engineering, August 2019. [pdf | Github]
- Víctor Massagué Respal, Joseph Alexander Brown, and Hamna Aslam. **"Monte Carlo Tree Search for Quoridor."** In 19th International Conference on Intelligent Games and Simulation, GAME-ON, September 2018. [pdf | Github]

EXPERIENCE

INNOPOLIS UNIVERSITY | RESEARCH INTERNSHIP ON UAV-BASED EXPLORATION OF UNKNOWN TERRAIN AT THE AUTONOMOUS TRANSPORT SYSTEMS LAB

June 2019 – July 2019 | Innopolis University, Russia

During the internship, a complete algorithm based on Next-Best-View planner was developed to explore, using the drone DJI M100, a bounded unknown area equipped with Velodyne LIDAR to build a 3D map online of the environment.

PROJECTS

HOME AUTOMATION MODEL | AN INTELLIGENT HOME MODEL WITH ARDUINO

May 2013 – Dec 2013 | Capellades, Spain

It consists in a model of 80x50cm of a house, applying different automatons for instance sensors for the lights of the garden when it is getting dark or an automated garage door when a car gets closer. The whole project is composed of two Arduino cells.

DOCUMENT SIMILARITY | ALGORITHM TO DETECT SIMILARITY BETWEEN DOCUMENTS

Sept 2016 – Dec 2016 | Barcelona, Spain

Detecting similarity between documents using hashing (Jaccard Similarity, Minhash Similarity and LSH Similarity). The project has been done with C++. [Github]

ROBOLANG | PARSER FOR A ROBOT PROGRAMING LANGUAGE

Feb 2017 - June 2017 | Barcelona, Spain

Worked with two colleagues developing a parser for a robot and an implementation of a simulator to test it. We were provided with a NXT Lego Mindstorm. The project was done with Java and ANTLR3. [Github]

STANCE DETECTION IN CATALAN AND SPANISH TWEETS | SIMPLE TECHNIQUE FOR STANCE DETECTION USING INDEPENDENCE OF CATALONIA TWEETS

Nov 2017 | Innopolis, Russia

Stance is given an ongoing interaction, the way speakers place themselves in it. It is described a simple technique for stance detection using Independence of Catalonia tweets. It is used word2vec word embedding features for this detection. The system had produce a best result for Spanish tweets as compare to other participants in IberEval 2017. [pdf | Github]

SCHOLARSHIPS/AWARDS

FULL SCHOLARSHIP FOR GRADUATE STUDIES | INNOPOLIS UNIVERSITY

Aug 2018 - Jun 2020 | Innopolis, Russia

DIPLOMA FOR OUTSTANDING ACADEMIC ACHIEVEMENTS IN FALL SEMESTER 2019 | INNOPOLIS UNIVERSITY

Jan 2020 | Innopolis, Russia

SKILLS

TECHNICAL SKILLS

Proficient with:

Python • C++ • Matlab • \LaTeX
• Java • ROS • Git • Linux

Familiar with:

MIPS • C • Android • Arduino
Prolog • Haskell • Bash • Docker

SPOKEN & WRITTEN SKILLS

Native:

Catalan, Spanish

Advanced:

English

LINKS

Personal Website which contains detailed information of my professional career

Research Gate / Google Scholar which contains my publications and current research projects

Github which contains open-source codes of some of my projects