

Valter Piedade

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PhD student on Computer Vision and Artificial Intelligence at Instituto Superior Técnico, working at the Institute for Systems and Robotics (ISR-Lisboa)

Experience

Mitsubishi Electric Research Laboratories, Consultant

Jul 2024 – present

Accenture, Summer Intern | Lisbon, Portugal

Jul 2018 – Aug 2018

- Developed Microsoft Excel macros in Visual Basic to speed up tasks performed by my team.

Education

PhD degree in Electrical and Computer Engineering, Instituto Superior Técnico | Lisbon, Portugal

Research areas: Computer Vision; Artificial Intelligence; SLAM; and Robotics

Student at the Institute for Systems and Robotics (ISR-Lisboa)

2022 – present

MSc degree in Electrical and Computer Engineering, Instituto Superior Técnico | Lisbon, Portugal

Major in Systems, Decision and Control and minor in Computers

Thesis: Retail Store Visual Structure-from-Motion

2019 – 2021

BSc degree in Electrical and Computer Engineering, Instituto Superior Técnico | Lisbon, Portugal

Awarded a Diploma of Academic Merit in 2015/2016

2015 – 2019

Projects

STORESLAM: Accurate Agent Localization and Mapping Methods for Structured Indoor Retail Store Environments

Sep 2020 – present

Research Grant

- Developed a **Visual SLAM** system for an autonomous mobile robot in a retail store environment using a single fisheye stereo camera;
- Designed and implemented the system from scratch in **C++**, featuring multithreading and a variety of optimization processes;
- Inputs and outputs were managed using **C++ ROS**, and visualization using VTK.

Publications

BANSAC: A dynamic Bayesian Network for adaptive Sample Consensus [[project page](#)]

Paris, France

IEEE/CVF International Conference on Computer Vision (ICCV) – Published

2023

V. Piedade and P. Miraldo

A Probability-guided Sampler for Neural Implicit Surface Rendering [[project page](#)]

Milan, Italy

European Conference on Computer Vision (ECCV) – Published

2024

G. D. Pais, V. Piedade, M. Chatterjee, M. Greiff, and P. Miraldo

Skills

Programming C++, Python, CMake, Git

Software OpenCV, Open3D, ROS 1/2, g2o, Ceres, VTK, Linux

Languages

Portuguese Native proficiency

English Professional working proficiency