

IACOPO CATALANO

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📍 Turku, Finland

 **Personal Web Page**
 iacopomc
 iacopocatalano

SKILLS

Programming: Python, C++, ROS, MATLAB
ML/DL: OpenCV, Tensorflow, Scikit-Learn

Languages: Native Italian, Proficient English, Intermediate Spanish
Elementary French, Elementary Japanese

PROJECTS

ENRICH Challenge - Team Member · *Zwentendorf Nuclear Power Plant (Austria)* 6/2023
· Contributed to the implementation of the 3D mapping and path planning stack for both a ground and aerial robot.

3D Multi Object Tracking

· Implemented a deep-learning approach, combining LiDAR-based vehicle detection from a birds-eye view perspective with an extended Kalman filter for vehicle tracking, incorporating both LiDAR and camera detections.

PROFESSIONAL EXPERIENCE

Research Associate · *University of Turku* 9/2023 – current
· Researching multi-robot collaboration for UAVs accurate positioning and ground-aided sense-and-avoid.

Research Intern · *KU Leuven* 2/2022 – 8/2022
· Researched a 3D mapping framework for a SLAM pipeline using RGB-D images in C++ as part of my master thesis work.

Research Intern · *Laboratoire Hubert Curien* 4/2021 – 7/2021
· Explored the use of Siamese CNNs based Multi-Object tracking algorithms to find the set of features that best distinguish between similar small electronic parts in real-time.

Junior Data Scientist · *Accenture* 1/2020 – 8/2020
· Researched and adapted existing algorithms in Computer Vision
· Conducted exploratory data analysis
· Supported Senior Data Scientists in algorithm design

Front-end Web Developer · *Accenture* 2/2019 – 1/2020
· Developed new web applications using Angular, Bootstrap, Angular Material and JavaScript
· Redesigned existing web applications to improve browser compatibility
· Oversaw new interns on project milestones

Front-end Web Developer (Intern) · *Accenture* 9/2018 – 2/2019
· Worked with Senior Developers to manage large, complex design projects
· Assisted team with testing code on multiple browsers

EDUCATION

Master of Engineering · *Toyohashi University of Technology* 2020 – 2022

M.Sc. Optics, Image, Vision, Multimedia · *University Jean Monnet* 2020 – 2022

M.Sc. Computer Science in XR · *University of Eastern Finland* 2020 – 2022

B.Sc. Physics · *Sapienza University of Rome* 2010 – 2018

RELEVANT COURSEWORK

2020: Deep Learning, a 5-course specialization by deeplearning.ai: CNN, GAN, RNN, NLP(LSTM)

2020: Tensorflow in Practice, a 4-course specialization by deeplearning.ai: CNN, NLP, Sequence Models using Tensorflow

2020: Control of Mobile Robots, Georgia Institute of Technology on Coursera

VOLUNTEER EXPERIENCE

Team Coordinator · *AGESCI* 2001 – 2015

· Coordinated, mentored, and trained several scout groups of different ages
· Led weekly meetings and organized yearly summer camps
· Secured parent involvement and participation in activities
· 2007 – 2009 Volunteer Stretcher (Patient Care) for U.N.I.T.A.L.S.I. Association