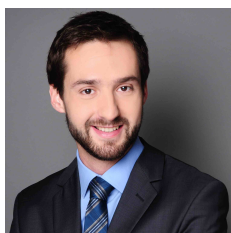


Curriculum Vitae



General Information

First and Last Name
Location
Email
Website · LinkedIn · Github
Date and Place of Birth

Mikel Sagardia

Donostia-San Sebastián (Spain)

sagardia.mikel@gmail.com

mikelsagardia.io · www.linkedin.com/in/mikel-sagardia/ · github.com/mxagar

January 13, 1984 in Donostia-San Sebastián (Spain)

Work Experience

Period
Position Held
Employer
Main Activities and Responsibilities

2022.04.01 – present (8 months)

Computer Vision and Machine Learning Engineer

Self Employed

- Contract work building machine vision and machine learning applications
- Consultancy and training on deep learning

Period
Position Held
Employer
Address of Employer
Main Activities and Responsibilities

2020.05.01 – 2021.12.31 (1 year and 8 months; currently on leave)

Senior Researcher

Vicomtech, Fundación

Mikeletegi 57, 20009 Donostia-San Sebastián (Spain)

- Coordinated and executed European and national projects
- Acquired new projects on computer vision, machine learning and robotics
- Supervised PhD students

Period
Position Held
Employer
Address of Employer
Main Activities and Responsibilities

2019.03.01 – 2020.03.31 (1 year and 1 month)

Project Engineer in Machine Vision

MVTec Software GmbH

Arnulfstr. 205, 80634 Munich (Germany)

- Managed and developed machine vision projects for key industry partners
- Trained customers and distributors on 3D vision and robotics
- Presented the Anomaly Detection feature at the MVTec Innovation Day 2020
- Provided second level technical support in a broad spectrum of machine vision topics

Period
Position Held
Employer
Address of Employer
Main Activities and Responsibilities

2008.04.01 – 2018.12.31 (10 years and 9 months)

Research Engineer in Robotics

German Aerospace Center (DLR), Institute of Robotics and Mechatronics

Muenchner Str. 20, 82234 Wessling (Germany)

- Led a 5-year project that built a VR framework for satellite on-orbit servicing
- Researched into collision and force computation methods for haptic rendering
- Coordinated and executed cooperation projects for industry partners (VW, Bosch)
- Published of 22+ papers at IEEE T. on Haptics / ICRA / VR, ACM VRST
- Presented robotic applications on trade fairs and congresses (Automatica, VW, etc.)
- Supervised 20+ students during their master's theses and internships

Achievements and **Awards**

- Best Video Award Finalist at the IEEE ICRA, 2014
- Best Paper Award at the 5th International Conference VAMR, 2013
- Short Paper Honorable Mention at the IEEE VR, 2012

Education and Training

Period
Qualification
Selected Courses

2017.08 – present
MOOC Certificates · github.com/mxagar/course_compilation

- Deep Learning Nanodegree (150+ hours) · Udacity
- Computer Vision Nanodegree (120+ hours) · Udacity
- Data Science Nanodegree (150+ hours) · Udacity
- Machine Learning DevOps Engineer Nanodegree (150+ hours) · Udacity
- IBM Machine Learning Professional Certificate (85+ hours) · Coursera / IBM
- Machine Learning (60+ hours) · Coursera / Stanford University
- Statistics with Python Specialization (60+ hours) · Coursera / University of Michigan

Period
Qualification
University
Dissertation Title

2013.12 – 2018.11
PhD in Electrical and Information Engineering (Dr.-Ing.), 2019
Technische Universität München, TUM (Germany)
Virtual Manipulations with Force Feedback in Complex Interaction Scenarios

Period
Qualification
Universities

2002.09 – 2008.02
M.Sc. in Mechanical Engineering (Ingeniero Industrial), 2008
Universidad de Navarra, TECNUN (Spain) and
Technische Universität München, TUM (Germany)

Achievements, **Awards** and
Scholarships

- Second Best Diploma Thesis Prize · Association of Engineers of Gipuzkoa
- Erasmus and Leonardo scholarships, exchange student at TUM
- High School Excellence Award for university access · Basque Government

Technical Skills

Programming Languages
Machine Vision
Machine Learning

Robotics
DevOps
Other Tools
Software Design

Python, C/C++, SQL, Bash, R, Matlab/Simulink
Halcon, OpenCV, PCL
Pytorch, Tensorflow & Keras, Scikit-Learn, Pandas, Matplotlib, Numpy, SciPy, NLTK, spaCy
ROS, Eigen, Bullet Physics Engine
Docker, Git & CI/CD Pipelines, MLflow, CMake, GoogleTest & Pytest
AWS (SageMaker, EC2, Lambda, API Gateway), FastAPI, Flask
Object Oriented Programming, Design Patterns

Languages

Mother Tongues
Advanced Level (C1/2)

Spanish, Basque (*Euskararen Gaitasun Agiria* · EGA)
German (*Goethe-Zertifikat C1*), **English** (Certificate in Advanced English · CAE)

Additional Information

Publications
Selected Projects
Selected Domains of Expertise

mikelsagardia.io/publications/
github.com/mxagar/project_compilation
Image Processing for Feature Detection · 3D Scene Reconstruction and Object Localization · Deep Learning for Image Classification and Object Detection · Regression and Classification with Tabular Data and Text (NLP) · Collision Detection and Simulations