## **Curriculum Vitae**



### **General Information**

First and Last Name

**Email** 

Website · Linkedin · Github

## Dr. Mikel Sagardia

sagardia.mikel@gmail.com

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

### **Work Experience**

Period

Position Held

**Employer** 

Address of Employer

Main Activities and Responsibilities 2023.05.01 - present

**Senior Data Scientist** 

**Deutsche Telekom** 

Friedrich-Ebert-Allee 140, 53113 Bonn (Germany) · Remote from Spain

- Design and development of object detection applications
- Research and development of vectorization algorithms for images and text
- Implementation of data clustering applications

Period

Position Held

**Employer** 

Main Activities and

Responsibilities

2022.04.01 - 2023.04.30 (1 year and 1 month)

# **Computer Vision and Machine Learning Engineer**

### Self Employed

- Built machine vision and machine learning applications as a contractor
- Supported and trained companies in the field of deep learning

Period

Position Held

**Employer** 

Address of Employer

Main Activities and

Responsibilities

Senior Researcher Vicomtech, Fundación

Mikeletegi 57, 20009 Donostia-San Sebastián (Spain)

2020.05.01 - 2021.12.31 (1 year and 8 months)

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

MVTec Software GmbH

Period

2019.03.01 - 2020.03.31 (1 year and 1 month)

Position Held

**Employer** 

Address of Employer

Main Activities and Responsibilities **Project Engineer in Machine Vision** 

- Arnulfstr. 205, 80634 Munich (Germany)
- Trained customers and distributors on 3D vision and robotics
- Presented the Anomaly Detection feature at the MVTec Innovation Day 2020

- Managed and developed machine vision projects for key industry partners

- Provided second level technical support in a broad spectrum of machine vision topics

Period

2008.04.01 - 2018.12.31 (10 years and 9 months)

Position Held

Research Engineer in Robotics

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

Muenchner Str. 20, 82234 Wessling (Germany)

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Address of Employer

Donostia-San Sebastián, October 2023

Main Activities and Responsibilities

- 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

2017.08 - present

Qualification

MOOC Certificates · github.com/mxagar/course compilation

Selected Courses

- 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

Period

2013.12 - 2018.11

Qualification

Technische Universität München, TUM (Germany)

University **Dissertation Title** 

Virtual Manipulations with Force Feedback in Complex Interaction Scenarios

Period

2002.09 - 2008.02

Qualification Universities M.Sc. in Mechanical Engineering (Ingeniero Industrial), 2008

Ph.D. in Electrical and Information Engineering (Dr.-Ing.), 2019

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/Computer Vision

Halcon, OpenCV, PCL

Machine Learning

Pytorch & Lightning, Tensorflow & Keras, Scikit-Learn, Pandas, Matplotlib, Numpy, SciPy, NLTK, spaCy, HuggingFace

Docker & Kubernetes, Git & CI/CD, MLflow, W. & Biases, DVC, Pytest

DevOps, MLOps Web Development

FastAPI, Flask, Streamlit, HTML & CSS

Python, C/C++, SQL, Bash, R

Cloud & Big Data Software Architecture AWS (SageMaker, EC2, Lambda, API Gateway, ECR/S, etc.), PySpark, Heroku

Object Oriented Programming, Design Patterns

Languages

Mother Tongues

Spanish, Basque (Euskararen Gaitasun Agiria · EGA)

Advanced Level (C1/2)

German (Goethe-Zertifikat C1), English (Certificate in Advanced English · CAE)

**Additional Information** 

**Publications** 

https://mikelsagardia.io/publications/

Selected Projects

https://github.com/mxagar/project\_compilation

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Donostia-San Sebastián, October 2023