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

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

- Consultancy and training on deep learning

Period

Position Held

Employer

Address of Employer

Main Activities and Responsibilities

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

2008.04.01 - 2018.12.31 (10 years and 9 months)

Position Held **Employer**

Address of Employer Main Activities and Responsibilities

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

2017.08 - present

Qualification Selected Courses

MOOC Certificates · github.com/mxagar/course_compilation

- Deep Learning Nanodegree (150+ hours) · Udacity
- Computer Vision Nanodegree (120+ 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

2013.12 - 2018.11

Qualification

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

University Dissertation Title

Technische Universität München, TUM (Germany)

Virtual Manipulations with Force Feedback in Complex Interaction Scenarios

Period

2002.09 - 2008.02

Qualification Universities 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

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

Machine Vision

Halcon, OpenCV, PCL Machine Learning

Pytorch, Tensorflow & Keras, Scikit-Learn, Pandas, Matplotlib, Numpy,

SciPy, NLTK, spaCy

Robotics

ROS, Eigen, Bullet Physics Engine

DevOps

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

Other Tools

AWS (SageMaker, EC2, Lambda, API Gateway), FastAPI, Flask

Software Design

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

Selected Domains of Expertise

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