Curriculum Vitae

General Information

First and Last Name	**Dr. Mikel Sagardia**
Email	sagardia.mikel@gmail.com
Website · Linkedin · Github	mikelsagardia.io · www.linkedin.com/in/mikel-sagardia/ · github.com/mxagar

Work Experience

Period	2023.05.01 – present
Position Held	**Senior Data Scientist and Machine Learning Engineer**
Employer	**Deutsche Telekom**
Address of Employer	Friedrich-Ebert-Allee 140, 53113 Bonn (Germany) · Remote from Spain
Main Activities and Responsibilities	– Design and development of object detection applications – Research and development of vectorization algorithms for images and text – Implementation of data clustering applications – Development and deployment of LLM- and RAG-based applications
Period	2022.04.01 – 2023.04.30 (1 year and 1 month)
Position Held	**Computer Vision and Machine Learning Engineer**
Employer	**Self Employed**
Main Activities and Responsibilities	– Built machine vision and machine learning applications as a contractor – Supported and trained companies in the field of deep learning
Period	2020.05.01 – 2021.12.31 (1 year and 8 months)
Position Held	**Senior Researcher**
Employer	**Vicomtech**, Fundación
Address of Employer	Mikeletegi 57, 20009 Donostia-San Sebastián (Spain)
Main Activities and Responsibilities	– Coordinated and executed European and national projects – Acquired new projects on computer vision, machine learning and robotics – Supervised Ph.D. students
Period	2019.03.01 – 2020.03.31 (1 year and 1 month)
Position Held	**Project Engineer in Machine Vision**
Employer	**MVTec** Software GmbH
Address of Employer	Arnulfstr. 205, 80634 Munich (Germany)
Main Activities and Responsibilities	– 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	**Research Engineer in Robotics**
Employer	**German Aerospace Center (DLR)**, Institute of Robotics and Mechatronics
Address of Employer	Muenchner Str. 20, 82234 Wessling (Germany)

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	**Ph.D. in Electrical and Information Engineering (Dr.-Ing.), 2019**
University	Technische Universität München, TUM (Germany)
Dissertation Title	Virtual Manipulations with Force Feedback in Complex Interaction Scenarios
Period	2002.09 – 2008.02
Qualification	**M.Sc. in Mechanical Engineering (Ingeniero Industrial), 2008**
Universities	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
Machine/Computer Vision	Halcon, OpenCV, PCL
Machine Learning	Pytorch & Lightning, Tensorflow & Keras, Scikit-Learn, Pandas, Matplotlib, Numpy, SciPy, NLTK, spaCy, HuggingFace
DevOps, MLOps	Docker & Kubernetes, Git & CI/CD, MLflow, W. & Biases, DVC, Pytest
Web Development	FastAPI, Flask, Streamlit, HTML & CSS
Cloud & Big Data	AWS (SageMaker, EC2, Lambda, API Gateway, ECR/S, etc.), PySpark, Heroku
Software Architecture	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