Gautier **Arcin**

ROBOTICS · FULLSTACK ENGINEER

3 Imp Henri Dominique Lacordaire, Appt. 407, 31400 Toulouse

(+33) 6 06 79 28 98 | gautier.arcin@gmail.com | gautierarcin.com | GautierArcin | gautierarcin | Driver license

Experiences

Research Engineer
Toulouse, France

INSTITUTE FOR RESEARCH IN COMPUTER SCIENCE OF TOULOUSE — *May 2021 - May 2022*

- Integration of a pronunciation error detection module in the backend of a website for the ALAIA laboratory.
- Realization of an application for IOS tablet, allowing the ENT of Toulouse to measure an intelligibility score.
- Maintainer of the Gitlab of the SAMOVA team.

→ React-Native (Expo, Redux, Axios), Typescript, Python (Flask), Docker, Git.

Study Engineer
Toulouse, France

INSTITUTE FOR RESEARCH IN COMPUTER SCIENCE OF TOULOUSE — *Nov. 2020 - May 2021*

- Implementation of a naive fusion of audio/video modalities. Very significant gain in accuracy compared to single modalities.
- Realization of a front-end website for the demonstration of the work done.

→ Python (Tensorflow, Keras), OpenCv, Prodigy, Javascript (ES6, React, Material UI).

Space Robotics Apprentice Engineer
Toulouse, France

MAGELLIUM — *Sept. 2019 - Aug. 2020*

- Integrator in the ESA H2020 Pulsar project in an agile team of 5 engineers.
- Integration of a software component to monitor the state and geometry of the assembly via a connected graph.
- Integration of Attitude and Orbit Control Systems on software simulator, allowing to compensate the perturbations of the satellite

→ C++ (C+17, Eigen, BGL), ROS, Rviz, Webots, Simulink, Gitlab, Docker, Blender.

R&D Robotics Engineer Trainee
Mondragon, Spain

MONDRAGON GOI ESKOLA POLITEKNIKOA — *Apr. 2019 - July 2019*

- Creation of a deep learning model and a semi-analytical model to characterize the dynamics of a Kuka KR3 540.
- Reverse engineering of the Kuka to recover its dynamic parameters and create an analytical model.
- Related publication featured in *The International Journal of Advanced Manufacturing Technology.*

→ Keras, Tensorflow, C++ (ROS), Python, Matlab (Peter Corke's toolbox).

Education

UPSSITECH - Université Toulouse III Paul Sabatier
Toulouse, France

ENGINEERING DEGREE IN ROBOTIC & INTERACTIVE SYSTEMS — *2017 - 2020*

- Double major in computer science and automation.
- Equivalent to a master degree.

Papers

22 oct. 2020 — **Torque-based methodology and experimental implementation for industrial robot standby pose optimization,** The International Journal of Advanced Manufacturing Technology, Issue 7-8/2020

Skills

Robotics	MGI/MGD, Path-Planning, linear algebra, 3D geometry, MoveIt, OpenCV, ROS, Gazebo, Webots, Simulink
Machine Learning	Tensorflow, Keras, Numpy, Scikit-learn, Panda
Back-end	Flask, REST API
Front-end	React, React-native (expo), Next, Redux, Material UI, HTML5, CSS
Programming	Javascript (ES6), Python, C, Modern C++, LaTeX
DevOps	Linux, Docker, Git, Gitlab
Langages	French (native speaker), English (confirmed, TOEIC 945/990), Spanish (intermediary)
Project management	Gantt, Scrum, V model
Soft-skills	Curious, Self-taught, Sociable

Center of interest

Reading (Favorite authors : A. Camus, R. Sapolsky, S. Harris) — Guitar (12 years of practice) — Running — 3D Printing