Koji Andriamahery

RESEARCH ENGINEER,
HEALTH TECHNOLOGIES

Contact

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Main Skills

Mechatronic systems development
- C / C++
- Fusion 360, 3DSEXPERIENCE

Process modeling and Cross-disciplinary systems engineering
- Matlab / Simulink
- Python

Technical project leading in both clinical and industrial settings
- ISO 13485
- IEC 60601

Languages :
- French (native)
- English (fluent)
- Spanish (notions)

Education

M.SC. IN DIGITAL HEALTH

Université de Montpellier • 2022
Major : Health Devices Engineering
- Graduated with high honors (Ranked 1st)

DIPLÔME D'INGÉNIEUR (M.ENG.)

IMT Mines Alès • 2022
Major : Mechatronics
- First TEDx Licensee of both the Engineering School and the city

About me

With an emphasis on healthcare, I am at ease within cross-disciplinary teams. My professional goal is to work for meaningful and challenging human-centered projects that can improve lives.

Work Experiences

RESEARCH ENGINEER - PH.D FELLOWSHIP

Stella Surgical • 06/2023 - current

- Conceived new types of bio-sensing analysis techniques and devices for organ transplants.
- Digital twin modeling of living organs for clinical decision making and logistic optimisation during organ transplant processes.

HARDWARE SYSTEMS ENGINEER

Stella Surgical • 01/2022 - 06/2023

- Established systems engineering methods (MBSE) and developed embedded systems in the field of medical devices and organ transplantation.
- Worked on process modeling, sensors integration and medical regulatory requirements.

HARDWARE ENGINEER

LIRMM • 09/2021 - 01/2022

- Led a personal research initiative : Hand gesture recognition and bio-sensing for sign language interpretation.
- Worked on hardware architecture, MCAD/ECAD & firmware programming (C/C++, Matlab).

ASSISTIVE TECHNOLOGY DESIGNER

HumanLab Saint-Pierre • 01/2021 - 07/2021

- Developed an assistive robotic orthosis for children in collaboration with health professionals of Institut Saint-Pierre (paediatric hospital).
- Designed hardware assistive technologies using rapid-prototyping techniques with end-users.

RESEARCH INTERN

Technische Universiteit Delft • 05/2020 - 08/2020

- Computational modelling of an ethical decision-making mechanism to incorporate moral uncertainty on autonomous vehicles.
- Application of data-science techniques (Python, SQL) on MIT's "Moral Machine" dilemma dataset.