Brayan S. **Zapata Impatá**

Robotics Research Engineer
Valencia, Spain
(+34) 650 393 168 | brayan.inf@gmail.com | yayaneath.github.io | Brayan S. Zapata-Impata

"Do or do not. There is no try."

Summary

I consider myself a **doer** who knows that **team work** is paramount for achieving **big goals**. I am **passionate about learning** and I am continuously **looking for challenges**. I can organise myself effectively to **deliver results**, even out of my comfort area. During my free time, I love reading books, listening and playing music, and walking my dog.

Work Experience

Amazon Robotics AI
Berlin, Germany

Applied Science Intern — *Mar. 2020 - Aug. 2020*

- Researched potential solutions for solving perception-related issues for robotic manipulators in logistics.
- Developed large-scale learning models, like ResNet, which were delivered to mitigate an economically impactful failure caused by manipulators.
- Elaborated crisp documents for reporting results to managers and team leaders.

Northeastern University
Boston, United States

Visiting Researcher — *May. 2018 - Sep. 2018*

- Studied the ways a mobile manipulator could help people at farms, construction sites and cities.
- Designed and implemented a mobile manipulation system, providing it with autonomy at three levels: task planning, grasping and mobility.
- Led its testing on the task of collecting and transporting a variety of objects in a challenging environment.

Critical Future LTD
London, England

Computer Vision Consultant — *Mar. 2018 - May. 2018*

- Led the technical development of a solution for a health-care company to detect skin cancer from pictures of skin moles.
- Collaborated with medical experts on the design of the system and its evaluation protocol.
- Implemented the system using deep learning models, like CNNs, and deployed it.

University of Alicante
Alicante, Spain

Robotics Research Engineer — *Apr. 2017 - Present*

- Researched on robotic grasping, grasp assessment and control using computer vision and tactile perception with multi-fingered hands.
- Designed experiments, developed the entire robotic systems, evaluated them and reported results to the laboratory managers.
- Delivered solutions that solved robotic manipulation problems using deep learning models like LSTMs, GANs and GCNs.

Teralco
El Altet, Spain

Business Intelligence Developer — *Jul. 2015 - Dec. 2016*

- Maintained and developed features for multi-dimensional databases in AWS Redshift, including Extraction-Transformation-Loading processes.
- Collaborated with marketing staff in data analysis projects, like client segmentation, proposing solutions from a machine learning perspective.

Education

University of Alicante
Alicante, Spain

PhD in Robotics and Machine Learning — *Oct. 2016 - Sep. 2020*

- Thesis: "Robotic Manipulation based on Visual and Tactile Perception".
- Proposed fast solutions that scale for robotic grasping as well as innovative methodologies for processing visual and tactile perception.
- Applied deep learning and computer vision techniques to 2D images, 3D point clouds and tactile data.

University of Alicante
Alicante, Spain

M.S. in Computer Engineering — *Oct. 2015 - Feb. 2017*

- Thesis: "Using Open Research Data for Building Recommendation Systems" - Graded with honours.
- Proposed a research tool for downloading, processing and building learning models from open research data.
- Specialised in applied artificial intelligence for R&D.

University of Alicante
Alicante, Spain

B.S. in Computer Engineering — *Sep. 2011 - Jul. 2015*

- Thesis: "Application of Swarm Intelligence for Improving a Clinical Decision Support System" - Graded with honours.
- Specialised on data mining, computer vision, robotics and artificial intelligence.