ALBERTO VICENTE CHACÓN

ROBOTICS AND AI ENGINEER

CONTACT

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Odense, Denmark

Click here to explore my LinkedIn profile

LANGUAGES

- Spanish (Native)
- English (Fluent)
  - IELTS grade 8
  - Trinity ISE III
- Danish (Modul 2 - A2)
- Italian (Basics - B1)
- German (Basics - A1)
- Japanese (Basics - JLPT N4)

SOFTWARE

- Python & C++
- Visual Studio Code
- ROS/ROS2 & Gazebo
- URDF / SDF
- PyTorch
- MuJoCo Simulator
- Git

VOLUNTEERING

- Participated in **charity concerts** named “Unidos por la paz”, playing the guitar.
- **Youth group leader** of a children's association in my local town.

PROFILE

I am a robotics engineer who is driven by the goal of using technology to make the world a little better. I enjoy diving into new challenges and learning the intricacies of deep and complex topics.

Since moving here, I have been dedicated to learning Danish to better understand the culture and connect with those around me. I am a very social person who values 'hygge' and quality time with my friends and partner. I love a good book, but I also really enjoy cozy meet-ups where I can debate interesting topics and hear different perspectives on the world. I believe that listening to different takes on a subject is the best way to keep learning and growing.

WORK EXPERIENCE

- **Syddansk Universitet (SDU)** — August 2024 - November 2025
  Robot Programmer

  Working on the **HospiBot European project** allowed me to apply a multidisciplinary approach to robotics. My primary focus was on a robotic mobile platform for hospitals. I took a hands-on approach to reliability by reworking the PID controllers and designing custom voltage management circuits to ensure seamless communication between the mobile platform's various electronic components.

  I could also work on a humanoid robot focused on human-robot interaction. I developed an image-based recognition pipeline that allowed the robot to identify and track the person most engaged with it.

- **Talgo** — April - August 2024
  Software Engineering Internsihp

  My main project was to build a Python-based testing tool from scratch to monitor train system responses. I created a simple interface where users could send messages to the train and see exactly how it responded. To make the communication work, I used UDP and TCP sockets. It was a great project, as it turned raw data into something easy for the team to read, showing things like system activations and response timings.

- **Siemens** — January - December 2023
  Electronic Engineering Internship

  I began this internship with no prior experience in CNC programming, so I had to learn a lot in a short time. I worked hard to get comfortable using SINUMERIK, SinuTrain, and Run MyVirtual Machine to program workpieces.

  I also used Siemens NX to design parts and simulate their manufacturing process. This experience was eye-opening for me, as it made me realise just how much complex work goes into the everyday objects we use.

EDUCATION

- **Robot Systems MSc (Advanced RoboticsTechnology)** 2024 - Present
  Syddansk Universitet (SDU)

  My curiosity and desire to experience new cultures led me to study my Master's abroad. I knew I wanted to specialise in robotics software, and after discovering the impressive robotics cluster in Odense, SDU was the perfect choice for me.

  Throughout the program, I have expanded my skills in several key areas, including:
  - Machine Learning (e.g. Evidential Deep Learning).
  - Image Processing and Computer Vision.
  - Systems & Control: Robot control and software architecture.
  - Software Development: Building reliable and scalable code for autonomous systems.

  Currently, I am working on my Master's Thesis, where I am researching Uncertainty Estimation in Deep Neural Networks. Specifically, I am using 'Evidential Deep Learning' in PyTorch to explore how robots can be made safer and more reliable when they use AI to make decisions.

- **Bachelor in Electronics and Automation Engineering** 2019 - 2024
  Universidad Politécnica de Madrid (UPM)

  Before moving to Denmark, I completed my degree in Madrid, where I built a strong foundation in how machines actually work. I spent my time learning about electronic circuits, sensors, and industrial control systems.

  While I enjoyed the hardware side, it was during this degree that I realised my real passion was for the 'brain' of the machine, the software. I spent a lot of time working with PLCs and embedded systems, which taught me how to bridge the gap between physical hardware and digital code. Completing this degree at UPM gave me the technical discipline I needed to take the next step into the more complex world of robotics software at SDU.

INDEPENDENT LEARNING & INITIATIVE

- **Self-Taught ROS2 & Omnidirectional Robotics**
  Driven by a curiosity to understand robot middleware, I started to learn ROS2 independently before it was introduced in my university curriculum. I applied this knowledge by designing and building a prototype for an omnidirectional robot. Although the project is still a work-in-progress, it allowed me to gain hands-on experience with motor control, sensor integration, and the practical challenges of robot navigation. This project taught me how to troubleshoot complex systems and find solutions outside of a classroom setting.

- **Custom 3D Printer Build**
  I enjoy staying ahead of the curve by exploring new technologies, so I decided to build my own 3D printer from scratch. I handled the entire process, from sourcing individual components in specialised shops to the final assembly and calibration. This project gave me a practical understanding of mechanical precision and the importance of high-quality hardware components.

- **Language & Cultural Studies (Japanese & Danish)**
  I find great joy in the challenge of learning languages. I independently prepared for and passed the JLPT 5 and 4 (Japanese Language Proficiency Test). While my Japanese is currently a bit 'rusty' due to a recent focus on my studies, the process taught me immense discipline. Currently, I am applying that same dedication to learning Danish, as I am eager to integrate into the local culture and workplace.

RELEVANT SKILLS

ROS
URDF & SDF
C/C++
VHDL
Github
3D Printing
Gazebo & Plugins
Hardware
Python
Linux
Docker