

# FERNANDO CORTE VARGAS

M.Sc. Cognitive Robotics Student

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📍 Rotterdam, NL

## SUMMARY

I am a dedicated, motivated, and detail-oriented M.Sc. Cognitive Robotics student with a passion for data and software. With a strong set of programming and design skills gained through coursework and personal projects, my career goal is to become a professional software developer while continuously expanding my knowledge and skills.

## SKILLS

**Languages:** Python, C++, C#.

**Libraries:** PyTorch, TensorFlow, Keras, Pandas, scikit-learn, Ray RLLib.

**Software:** Unity, ROS, MATLAB, CATIA.

**Other:** Git, Bash, SQL, Azure, Docker,  $\text{\LaTeX}$ .

## PROJECTS

7/2023 - ongoing **Ofrenda**

Currently developing Ofrenda, a solo-developed video game that I took on as a hobby. This video game is a 2D pixel art puzzle platformer, inspired by the Mexican holiday Día de Muertos. Working on the end-to-end development with C# using Unity, the design of animated sprites with Aseprite, and the design of gameplay mechanics and levels. Aiming to release the game in the medium term.

4/2023 - 7/2023 **Retail Robotic Arm Manipulator**

Contributed to the software development of a mobile manipulator robot designed to relocate incorrectly placed products on supermarket shelves, in collaboration with Ahold Delhaize. Focused on human-robot interaction to ensure safety and promote engagement with customers in retail environments.

4/2022 - 9/2023 **RSA Projects**

Supported student-led robotics projects with general questions, coding troubleshooting, and member recruitment. Mentored student groups to kickstart their own projects.

## EXPERIENCE

7/2021 - ongoing **Senior Host**

X TU Delft

- Lead front desk employee at the sports and culture center of the university. First point of contact for customers and responsible for the handling of complaints and scheduling of other front desk employees.
- Provide online and on-site support for customers, troubleshooting, and emergency response.

9/2022 - 1/2023 **Machine Learning Intern**

Viroteq.ai

- Developed and tested a look-ahead algorithm to enhance the reinforcement learning-based on-the-fly mixed palletizing stacking AI provided by Viroteq.ai.
- Learned to use Ray RLLib, and learned the basics of Docker and Azure cloud computing services.

1/2021 - 1/2022 **Teaching Assistant**

Delft University of Technology

- Helped students with project management, systems engineering, and flight dynamics questions.
- Assisted lecturers with course organization, assignment grading, and communication with students.

## EDUCATION

9/2021 - ongoing **M.Sc. Cognitive Robotics**

Enrolled, currently working on M.Sc. thesis. Graduating in June 2024.

Delft University of Technology

9/2017 - 1/2021 **B.Sc. Aerospace Engineering**

Graduated. Minor in Computer Science.

Delft University of Technology

## CERTIFICATIONS

**Unity Junior Programmer**

Unity

Validates skills and competencies to be a proficient junior programmer writing scripts in C# to create interactive experiences with the Unity Editor.

**Emergency Response Officer**

NIBHV

Validates skills and competencies to provide first aid, contain and fight fires, alert and evacuate employees and all other persons present on the premises in the event of an emergency.

## LANGUAGES

**Spanish** - native, **English** - C1+, **French** - C1, **Dutch** - B2, **Portuguese** - B1, **Dutch Sign Language** - B1