Penélope Cerón Castillo

Email: pcer210@gmail.com   Linkedin:
Phone: +52 5539725073
Location: Mexico

PROFILE

I'm a Mechatronics Engineering graduate with a focus on software engineering. My commitment to interdisciplinary problem-solving has led me to develop ambitious projects in the fields of autonomous vehicles and biotech. My experiences have provided me with a unique and valuable multicultural perspective. I'm eager to enhance my AI proficiency and drive socially and environmentally impactful innovations.

EXPERIENCE

Aug 2021 - Jan 2022   **Research Intern, Shrike Zhang Lab (Harvard University)**   **USA**

- Led a team of engineers through the design and construction of a DLP 3D bio-printer
- Designed, modeled and prototyped parts for the entirety of the printer using Solidworks
- Developed Python algorithms for experimental parameter testing
- Utilized Arduino to synchronize the user interface with the printer's hardware
- Sourced robust and cost effective materials
- Coordinated an engineering team and ensured effective communication with the biomedical research team
- Conducted extensive literature reviews to incorporate relevant findings
- **Achievement**: 1 publication in the Applied Physics Reviews journal

PROJECTS & VOLUNTEER WORK

Aug 2022 - Dec 2022   **Nutrello - Student led project to reduce food waste and hunger**   **Mexico**

- The project focused on developing and implementing a system to distribute surplus food from restaurants and supermarkets to people in need within the Monterrey metropolitan area.
- As a member, I aided in the logistic development of the project, secured restaurant partnerships and helped make a preliminary design for the app.

Feb 2019 - June 2020   **Autonomous vehicles student group member**   **Mexico**

- Collaborated in autonomous vehicles (UUV & USV) research projects
- Utilized ROS, Linux and Git in navigation control and computer vision
- Performed object oriented programming in C++ and Python

Aug 2019 - Nov 2019   **Volunteer English Teacher**   **Mexico**

- Helped future elementary school teachers improve their reading, writing, speaking and listening skills through dynamic and engaging weekly lessons

EDUCATION

Jan 2018 - Feb 2024   **Honors Bachelor of Mechatronics Engineering, Tecnológico de Monterrey**   **Mexico**

- GPA 96%, *summa cum laude*

Feb 2023 - June 2023   **Certificate of proficiency in Exchange, The University of Auckland**   **New Zealand**

- GPA 4.0 = 98%

LANGUAGES

- English: C1 - TOEFL IBT score 112
- French: B2
- Spanish: Native

SKILLS

- PROGRAMMING: Python, C++, HTML, SQL, SOFTWARE: Solidworks, Matlab, SwiftUI, Labview
- COLLABORATIVE: GrabCAD, Git