

# Leonel Alejandro Montoya

+1 (562) 380 5470 | [leonelmontoya12@gmail.com](mailto:leonelmontoya12@gmail.com) | [linkedin.com/in/lamontoya](https://www.linkedin.com/in/lamontoya) | [github.com/BlackDeath12](https://github.com/BlackDeath12)

## EDUCATION

<b>Instituto Tecnológico de Monterrey</b> <i>High School Graduate with Honors. GPA 4.0 out of 4.0</i>	Guadalajara, Mexico Aug. 2019 – May 2022
<b>University of California San Diego</b> <i>Aerospace Engineering and Computer Science. GPA 3.6 out of 4.0</i>	San Diego, CA Sep. 2022 – present

## EXPERIENCE

<b>Hack at UCI Best Beginner Hack</b> <i>University of California Irvine</i> <ul style="list-style-type: none"><li>Developed a website hosted using Google Cloud that simplifies the process of splitting bills with multiple people.</li><li>Implemented a Django framework and SQLite database for the website.</li><li>Led a team of two software engineers in the back-end development of the website.</li></ul>	2024 Irvine, CA
<b>HackDavis Participant</b> <i>University of California Davis</i> <ul style="list-style-type: none"><li>Developed a website that generates a cooking recipe based on the ingredients available.</li><li>Implemented a React framework and Open AI's API</li><li>Led a team of three software engineers for the back-end development of the website.</li></ul>	2023 Davis, CA
<b>FIRST Robotics Competition</b> <i>Instituto Tecnológico de Monterrey</i> <ul style="list-style-type: none"><li>Developed the mechanical aspects of a robot capable of multi-directional movement, picking up and throwing 15cm-diameter balls, and climbing parallel bars up to 2.5m.</li><li>Guided new team members to enhance their understanding of robotics.</li><li>Contributed to team organization and management to have the robot ready for competition before the deadline.</li></ul>	2020 and 2022 Monterrey, Mexico
<b>Coding, Chemistry, Math, and Physics Tutor</b> <i>University of California San Diego &amp; Instituto Tecnológico de Monterrey</i> <ul style="list-style-type: none"><li>Taught class subjects to individual students and small groups.</li><li>Prepared students for school exams and college admission tests.</li><li>Organized study and homework sessions for multiple students.</li><li>Greatly increased the students' proficiency at school and helped them obtain college admission.</li></ul>	2019 – 2022 & 2024 – Present Guadalajara, Mexico; San Diego, CA
<b>'Split It' Co-founder and CS Lead</b> <i>University of California San Diego</i> <ul style="list-style-type: none"><li>Co-founder and Software Development lead of 'Split it', a web/app application that facilitates splitting restaurant bills between multiple customers.</li></ul>	2024 San Diego, CA

## PROJECTS

<b>Radio Communication Protocol   Micropython</b> <ul style="list-style-type: none"><li>Developed a 433Mhz radio receiver algorithm to handle data reception through high and low electrical signals. The algorithm is based on the Manchester code, a data transfer protocol.</li></ul>
<b>Radio Receiver Micropython Library  </b> <ul style="list-style-type: none"><li>Developed a Micropython library that handles 433Mhz high and low electrical signals, intended for use on a Raspberry Pi Pico with a receiver module.</li></ul>
<b>RaspberryPi Robot   Python</b> <ul style="list-style-type: none"><li>Developed a remote-controlled robot with infrared camera using a RaspberryPi 4 microprocessor</li></ul>

## TECHNICAL SKILLS

**Languages:** Python, C/C++, Java, JavaScript, MATLAB, Arm Assembly, HTML/CSS  
**Libraries:** Matplotlib, Pandas  
**Microcontrollers & Microprocessors:** Raspberry Pi, Raspberry Pi Pico, Arduino  
**Frameworks:** Django, React, React Native, Node.js  
**Developer Tools:** Linux, Git, Github, Google Cloud Platform, Visual Studio Code  
**Skills:** Algorithms, Troubleshooting, Application and Web Development, Research, Leadership, Interpersonal Skills