

# CPRE 288 Final Project

## Team member responsibilities

Team Name: SF-PG4

Team Collaboration

Team Member	Contribution
Dawud Benedict	<ul style="list-style-type: none"><li>• Designed prototype sketches.</li><li>• Wrote the application narrative.</li><li>• Developed improved scanning and object point calculation.</li><li>• Worked on movement functions with Armondo.</li><li>• Assisted Chris on gap detection and navigation.</li><li>• Improved the main function with a movement to dummy point for bump and cliff avoidance.</li></ul>
Armondo Reyes	<ul style="list-style-type: none"><li>• Leader in user research and empathy map development.</li><li>• Created calibration functions for cliff sensors, movement, and IR scanning.</li><li>• Improved oi sensor reading.</li><li>• Documentation of code.</li><li>• Added sound implementation.</li><li>• Worked with Dawud to build bump and cliff reaction and avoidance functions.</li></ul>
Chris Marchitto	<ul style="list-style-type: none"><li>• Developed the problem statement.</li><li>• Created functional requirements tables.</li><li>• Documentation of code.</li></ul>

	<ul style="list-style-type: none"> <li>• Leader in gap detection and midpoint calculations.</li> <li>• Utilized trigonometry to develop a grid layout that tracks the bot's position and direction.</li> <li>• Made the main function and depot locations.</li> <li>• Worked with Connor to implement UART codes to send to the GUI.</li> </ul>
Connor Grim	<ul style="list-style-type: none"> <li>• Created GUI with UART communication to the bot.</li> </ul>