

# HEMANTH S. KORALLA

1400 El Camino Village Dr, Houston TX 77058 • 614-717-5085 • hemanth.koralla@gmail.com • U.S. Citizen

## OBJECTIVE

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Software and computer engineer with a passion for space systems, healthcare robotics, autonomous vehicles, and advanced computing topics. Seeking a position to further increase my software experience while developing a product to revolutionize this technology space and make tomorrow better than yesterday.

## EDUCATION

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**GEORGIA INSTITUTE OF TECHNOLOGY, College of Engineering** **Atlanta, Georgia**  
**Bachelor of Science in Computer Engineering** *May 2018*

- Minor in Engineering & Business through the Denning Technology & Management Program
- Concentration: Systems and Controls, Robotics

**GEORGIA INSTITUTE OF TECHNOLOGY, College of Computer Science** **Atlanta, Georgia**  
**Master of Science in Computer Science** *August 2019 - Present*

- Concentration: Computational Perception and Robotics

## SKILLS

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**Programming:** C++, C, Python, MATLAB (proficient)

**Frameworks:** Linux, Git, Robot Operating System (ROS), Jupyter Notebook, Atlassian Tool Suite

## EXPERIENCE

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**NATIONAL AERONAUTICS AND SPACE ADMINISTRATION (NASA) / JACOBS** **Houston, Texas**  
*Design Strategy Software Developer* *March 2022 – Present*

- Developing prototype software for the Vehicle System Manager (VSM) of the Gateway space station
- Strategize effective algorithms and requirements for planning component of the VSM
- Responsible for building and implementing a CICD flow with reliable integration tests

**GENERAL MOTORS** **Warren, Michigan**  
*Ultra Cruise Map Embedded Software Engineer for Autonomous Vehicles* *October 2021 – Present*

- Designing a tool to help visualize map data in a more lean and efficient manner with Apache Parquet
- Responsible for the integration of the map submodule into the greater Ultra Cruise system

*Ultra Cruise Adaptive AUTOSAR Software Developer for Autonomous Vehicles* *August 2020 – October 2021*

- Analyzed and wrote Adaptive AUTOSAR specifications for the State Manager Function Cluster
- Created software for the State Manager to manage the states of various Function Groups

*Ultra Cruise Map Data Tools Software Engineer for Autonomous Vehicles* *August 2019 – July 2020*

- Developed software to solve the high-definition mapping problem for autonomous vehicles
- Established a strong CICD cycle to ensure all software undergoes rigorous unit and system testing
- Led the design of software modules to detect and classify certain mapping features

*Ultra Cruise Systems Integration Engineer for Autonomous Vehicles* *August 2018 – August 2019*

- Developed integration test cases for mapping and localization software teams
- Collaborated with system and software engineers to determine program requirements
- Automated parsing tools which analyze vehicle data recordings to validate software

## LEADERSHIP

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**NATIONAL AERONAUTICS AND SPACE ADMINISTRATION (NASA) / JACOBS** **Houston, Texas**  
*ASIA ERG Recording Secretary* *January 2023 – Present*

- Designing networking, social, and volunteering opportunities for ERG members
- Responsible for detailed meeting notes, ideation, and event management

**GENERAL MOTORS** **Warren, Michigan**  
*TRACK Advisory Board Website Lead* *January 2020 – July 2020*

- Managed a team of 8 software developers to create a manager/employee matching process
- Created an Angular/Node application on top of SharePoint to present a list of jobs for employees