

# Sravan Balaji

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## EDUCATION

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- **University of Michigan**

*B.S.E. in Mechanical Engineering and Computer Science; GPA: 3.757*

Ann Arbor, MI

*Sep. 2016 – Dec. 2020*

- Autonomous Robotics Lab, Mobile Robotics, Computer Vision, Design of Digital Control Systems

## WORK EXPERIENCE

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- **Rivian**

*ADAS Controls Intern*

Remote

*Jun. 2020 – Aug. 2020*

- Supported creation of Model-in-Loop framework for production controls software components; tested 50 requirements, identified and resolved 7 issues
- Integrated speed limit algorithm into production controls software for use with Simulink Coder C/C++ code generation; considerations made for embedded system processing limits and time delays
- Modified MATLAB data processing scripts to work with new test logs; compared performance against requirements and simulation to determine controls parameters to tune

- **Hughes Network Systems**

*Software Development Intern*

San Diego, CA

*May 2019 – Aug. 2019*

- Created Windows GUI app in C# employing .NET framework; automated mobile terminal configuration process to reduce user involvement, prevent errors, and decrease configuration time
- Implemented location based services on terminal software written in C; leveraged MQTT-SN protocol to provide low-cost method of sending GPS data to server

- **Rivian**

*Business Technology Intern*

Plymouth, MI

*May 2018 – Dec. 2018*

- Championed effort to remove BOM data inconsistencies; developed Excel macro to summarize mass and cost data, alert PMs of incorrect data; resulted in faster detection and resolution of issues
- Introduced and designed an internal website to collect and display data from business systems utilizing Python and Django; worked with REST APIs to present reports of issues by severity
- Led effort to migrate IT team to a new service desk; worked with Jira Service Desk to automate triage and assignment of IT tickets; increased ticket resolution rate within SLA targets from 70% to 95%

*Vehicle Integration Intern*

*Jun. 2017 – Aug. 2017*

- Developed a program in Java to summarize results of simulation; allowed users to modify inputs to see projected results of simulation to avoid additional testing and reduce costs

## RESEARCH

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- **Compliant Systems Design Lab**

*Research Assistant*

Ann Arbor, MI

*Jan. 2019 – Apr. 2019*

- Formulated and conducted an experiment to investigate applicability of digital image correlation (DIC) for analyzing strain in fiber reinforced elastomeric enclosures (FREEs)
- Analyzed creep behavior of FREEs and generated plots with C++ program

## SKILLS

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- **Programming:** C++, C#, C, Python, Arduino, ROS, Java, Excel VBA,  $\text{\LaTeX}$ , HTML, CSS
- **Computer Aided Design:** SolidWorks, CATIA
- **Simulation:** MATLAB, Simulink
- **Languages:** English (first language), French (conversational), Tamil (conversational)