Sravan Balaji

Email: balajsra@umich.edu   Phone: (248) 417 - 0955   LinkedIn: sravan-balaji   Website: sravanbalaji.com

EDUCATION

- **University of Michigan**   Ann Arbor, MI

  M.S. in Robotics; Focus in Acting; GPA: 3.957   *Jan. 2021 – Dec. 2021*

  - Mobile Robotics; Design of Digital Control Systems; Robot Operating Systems; Robotic Systems Lab

  B.S.E. in Mechanical Engineering; Focus in Controls; GPA: 3.776   *Sep. 2016 – Dec. 2020*

  - Automatic Control; Modeling, Analysis, and Control of Dynamic Systems

  B.S.E. in Computer Science; Focus in Intelligent Systems; GPA: 3.776   *Sep. 2016 – Dec. 2020*

  - Autonomous Robotics Lab; Machine Learning; Computer Vision

WORK EXPERIENCE

- **MITRE**   Remote

  Graduate Navigation Intern   *May 2021 – Aug. 2021*

- **Rivian**   Remote

  ADAS Controls Intern   *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**   San Diego, CA

  Software Development Intern   *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**   Plymouth, MI

  Business Technology Intern   *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

SKILLS

- **Programming**: C/C++, Python, MATLAB, JavaScript, C#, Java, Arduino, LaTeX
- **Development**: GNU/Linux, Git, Docker, Vim, GNU Emacs, Visual Studio Code
- **Libraries/Frameworks**: ROS, GTSAM, NumPy, OpenCV, PyTorch, Vue.js, Bootstrap
- **Computer Aided Design**: SolidWorks, CATIA
- **Languages**: English (first language), French (conversational), Tamil (conversational)