

List of Publications

Ramchander Rao Bhaskara

June 2022

Master's Thesis

Bhaskara Ramchander Rao. Hardware implementation of navigation filters for automation of dynamical systems. Master's thesis, Texas A&M University, 2021.

Publications (published, submitted and to-appear)

Ramchander Rao Bhaskara, Roshan Eapen, and Manoranjan Majji. Differentiable rendering for pose estimation in non-cooperative proximity operations. Submitted, AIAA SciTech Forum, 2023.

Ramchander Rao Bhaskara, Roshan Eapen, Andrew Verras, and Manoranjan Majji. Texas A&M Space Object Rendering Engine (ScORE). Lunar Surface Innovation Consortium, JHU APL, 2021.

Ramchander Rao Bhaskara, Patrick Kelly, Manoranjan Majji, and Felipe Guzman. Fpga architecture for high-speed estimation from inertial sensors. (To appear in Sensors MDPI).

Ramchander Rao Bhaskara and Manoranjan Majji. Fpga hardware acceleration for feature-based relative navigation applications. Accepted at Astrodynamics Specialist Conference, 2022.

Ramchander Rao Bhaskara, Kookjin Sung, and Manoranjan Majji. An fpga framework for interferometric vision-based navigation (ivisnav). Accepted at Digital Avionics and Systems Conference (DASC), 2022.

Manoranjan Majji Roshan Eapen, Ramchander Rao Bhaskara. Narpa: Navigation and rendering pipeline for astronautics. (To appear in Journal of Guidance, Control, and Dynamics).

Kookjin Sung, Ramchander Bhaskara, and Manoranjan Majji. Interferometric vision-based navigation sensor for autonomous proximity operation. In *2020 AIAA/IEEE 39th Digital Avionics Systems Conference (DASC)*, pages 1–7. IEEE, 2020.

Andrew Verras, Roshan Thomas Eapen, Andrew B Simon, Manoranjan Majji, Ramchander Rao Bhaskara, Carolina I Restrepo, and Ronney Lovelace. Vision and inertial sensor fusion for terrain relative navigation. In *AIAA Scitech 2021 Forum*, page 0646, 2021.