

# Indujaa Ganesh

University of Arizona  
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## EDUCATION

- Doctoral candidate**, Planetary Sciences expected 2022  
Lunar and Planetary Laboratory, University of Arizona, Tucson  
Advisor: Prof. Lynn M. Carter  
Thesis: Modeling and radar studies of pyroclastic volcanism on Mars and Venus
- Master of Science** (*en route*), Planetary Sciences 2020  
Lunar and Planetary Laboratory, University of Arizona, Tucson  
Advisor: Prof. Lynn M. Carter
- Master of Technology**, Geoinformatics and Natural Resources Engineering 2017  
Indian Institute of Technology Bombay, Mumbai  
Advisor: Prof. Alok Porwal  
Thesis: Morphometric analyses of Interior Layered Deposits in Valles Marineris, Mars
- Bachelor of Engineering**, Geoinformatics 2014  
College of Engineering Guindy, Anna University, Chennai  
Thesis: Sub-pixel analysis of slope streaks in Arabia Terra, Mars

## AWARDS & SCHOLARSHIPS

- University of Arizona Galileo Circle Scholarship 2020  
Venus Exploration and Analysis Group Travel Award 2019  
Future Investigators in NASA Earth and Space Science and Technology 2019  
Graduate & Professional Student Council (GPSC) Travel Grant 2018  
Lunar and Planetary Laboratory Curson Education Plus Fund Award 2018  
Government of India – Ministry of Human Resource Development’s Postgraduate Scholarship 2015  
German Academic Exchange Service’s (DAAD) Working Internships in Science and Engineering Scholarship 2013  
Indian Academy of Sciences Summer Research Fellowship 2012

## RESEARCH EXPERIENCE

- Graduate Research Assistant**, University of Arizona  
Advisor: Prof. Lynn Carter  
SHARAD mapping of Arsia Mons Aug 2017 – Jul 2019  
Modeling pyroclastic flow deposition on Venus Jul 2019 – now
- Exploration Science Summer Intern**, Lunar and Planetary Institute  
Advisor: David Kring  
Investigations of potential landing sites for NASA’s Artemis program June & July, 2020
- MTech. thesis**, Indian Institute of Technology Bombay  
Advisor: Prof. Alok Porwal  
Geomorphology of Layered Deposits of Valles Marineris July 2016 – May 2017

**DAAD Summer Intern**, Institute of Geography, University of Heidelberg

Advisor: Prof. Bernhard Hoefle

Processed LiDAR point clouds for LVISA project  
(<http://lvisa.geog.uni-heidelberg.de/>)

June & July, 2013

**Summer Research Fellow**, Physical Research Laboratory, Ahmedabad

Advisor: Prof. S. A. Haider

Analysis of seasonal variations in the lower atmosphere of Mars

June & July, 2012

## PEER REVIEWED PUBLICATIONS

McGuire, L. A., Youberg, A. M., Rengers, F. K., Abramson, N. S., **Ganesh, I.**, Gorr, A. N., Hoch, O., Johnson, J. C., Lamom, P., Prescott, A. B., Zanetell, J., Fenerty, B. Extreme Precipitation Across Adjacent Burned and Unburned Watersheds Reveals Impacts of Low Severity Wildfire on Debris-Flow Processes. *Journal of Geophysical Research: Earth Surface* (2021): JGRF21328. doi: 10.1029/2020JF005997.

**Ganesh, I.**, Carter, L. M., and Smith I. B. SHARAD mapping of Arsia Mons caldera. *Journal of Volcanology and Geothermal Research* (2019): 106748. doi: 10.1016/j.jvolgeores.2019.106748

## CONFERENCE ABSTRACTS

Henz, T., **Ganesh, I.**, Carter, L. M. Measuring the Radar Properties of Pyroclastic Deposits in Eistla Regio, Venus. 52<sup>nd</sup> Lunar and Planetary Science Conference (2021). Virtual conference. #2150

**Ganesh, I.**, McGuire, L., Carter, L. M. Dynamics of Dense Pyroclastic Flows on Venus – Insights into Pyroclastic Eruptions. 52<sup>nd</sup> Lunar and Planetary Science Conference (2021). Virtual conference. #1218

Kumari, N. **Ganesh, I.**, Lang, A., Bretzfelder J., M., Kring, D. A. Geological Diversity at Two Potential Landing Sites in the Lunar South Pole. 52<sup>nd</sup> Lunar and Planetary Science Conference (2021). Virtual conference. #1197

Bretzfelder J., M., Lang, A., **Ganesh, I.**, Kumari, N., Kring, D. A. Geological Analysis and Possible EVA Targets for an Artemis III Landing Site Bounded by Shackleton and Slater Craters. 52<sup>nd</sup> Lunar and Planetary Science Conference (2021). Virtual conference. #1148

**Ganesh, I.**, McGuire, L., Carter, L. M. Modeling Deposition from Dense Pyroclastic Density Currents on Venus. 18th Meeting of the Venus Exploration and Analysis Group (2020). Virtual conference.

**Ganesh, I.**, McGuire, L., Carter, L. M. Pyroclastic Flow deposition on Venus. 51<sup>st</sup> Lunar and Planetary Science Conference (2020). Cancelled.

**Ganesh, I.**, Carter, L. M., Smith, I. SHARAD mapping of the Caldera of Arsia Mons. 50<sup>th</sup> Lunar and Planetary Science Conference (2019), The Woodlands, Texas, #1859

**Ganesh, I.**, Carter, L. M., Smith, I. Subsurface Interfaces in the Arsia Mons Caldera - Observations from SHARAD. 49<sup>th</sup> Lunar and Planetary Science Conference (2018), The Woodlands, Texas, #2807

**Ganesh, I.**, Porwal, A. A GIS Based Compilation of Morphometric Parameters of Valles Marineris ILLDs. 48<sup>th</sup> Lunar and Planetary Science Conference (2017), The Woodlands, Texas, #2324

Sarkar, R., Singh, P., **Ganesh, I.**, Porwal, A. Origin of mass wasting features in Juventae Chasma, Mars. 47<sup>th</sup> Lunar and Planetary Science Conference (2016), The Woodlands, Texas, #1876

Singh, P., Sarkar, R., **Ganesh, I.**, Porwal, A. Origin of fluvial channels in the walls of Juventae Chasma: evidences of groundwater sapping? 47<sup>th</sup> Lunar and Planetary Science Conference (2016), The Woodlands, Texas, #1878

## WORKSHOPS

NASA Planetary Volcanology Workshop, Hilo, Hawaii	2019
Workshop on Geology and Geophysics of the Solar System, Petnica, Serbia	2018

## TEACHING

<b>Graduate Teaching Assistant</b> , University of Arizona PTY5 170B2 – The Universe and Humanity: Origin and Destiny Duties included grading homework, proctoring exams, holding office hours, conducting review sessions, and guest lectures.	Fall 2018
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<b>Graduate Teaching Assistant</b> , Indian Institute of Technology GNR 603 – Introduction to Principles of Remote Sensing Duties included grading, conducting lab demonstrations, and guest lectures.	Fall 2016
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## SERVICE

<b>Organizing committee</b> , Lunar and Planetary Laboratory Conference Co-organizer for the annual intra-department conference.	Since 2018
Served as <b>executive secretary</b> on NASA review panels	Since 2020
Reviewer for Journal of Geophysical Research	Since 2020