

REGUPATHI ANGAPPAN



3400 N. Charles St, Johns Hopkins University, 301 Olin Hall, Baltimore, MD 21218

Education:

Johns Hopkins University, Baltimore, MD

Doctoral (Ph.D.) student, Earth and Planetary Sciences, Aug. 2017 – present Advisor: Dr. Sabine Stanley, Co-adviser: Dr. Brian J. Anderson

University of Washington, Seattle, WA

B.Sc., Earth and Space Science (Physics), physics and math minors, Sep. 2013 – Jun. 2017 Earth and Space Science Departmental GPA (4.0 scale): 3.94 Cumulative GPA: 3.82 Magna Cum Laude, Dean's List all quarters, Departmental Honors.

Relevant Professional Activities and Employment:

Outreach Coordinator, Earth and Planetary Science, Johns Hopkins Univ., 2017 – Present Collaborated with local schools, institutes, and meet up groups to plan and implement outreach activities.

JHU Teaching Academy Fellow, Johns Hopkins Univ., 2017 - Present Participating in academic career and science communication opportunities and teaching practicums.

Undergraduate Teaching Assistant, Earth and Space Science, Univ. of Washington, 2014 - June 2017

Classes taught include Introduction to Earth & Space Science, Minerology & Petrology, Field Geology, seminars in science communication and research.

Assistant Resident Director, Haggett Hall, Housing and Food Services, Univ. of Washington, 2015 - June 2017

Advised and supervised resident advisers in the community. Primary adviser for Rick's Café. Managed and oversaw facilities in residence halls. Helped with all administrative tasks and managed student conduct load within the university's residential life unit.

Resident Advisor, Mercer Hall, Housing and Food Services, Univ. of Washington, 2014 - June 2015 Implemented a model of an inclusive and welcoming community in residence communities to enrich the undergraduate experience of students. Lead community development and resident engagement programs.

Fellowships, Honors and Awards:

NASA FINESST, Fall 2019 – present

Mary Gates Research Award, Fall 2016 – Summer 2017

PETRONAS Scholar Award (full-ride undergraduate scholarship), Fall 2012 – Summer 2017

Select Research Experience:

Graduate Research Assistant, Johns Hopkins Univ., Baltimore, MD, Aug. 2017 – present Analysis of geomagnetic field from Constellation of Iridium satellites, High precision determination

of Mercury's magnetic field and interior structure Adviser: Prof. Sabine Stanley Co-adviser: Dr. Brian J. Anderson

- **Undergraduate Researcher**, Univ. Of Washington, Seattle, WA, Summer 2014 Summer 2017 Assessment of detrital remanent magnetization (DRM) in glacial lacustrine sediments Adviser: Dr. Terry Swanson, Univ. Of Washington, Seattle, WA Collaborator: Dr. Bernard Housen, Pacific Northwest Paleomagnetic Lab, Western Washington University.
- **Research Mentor**, Univ. Of Washington, Seattle, WA, Summer 2016 Summer 2017 Supervised six undergraduates in the department of Earth and Space Science
- **Undergraduate Research Leader**, Univ. Of Washington, 2015 Summer 2017 Student staff member of the Undergraduate Research Program.

Select Research Presentations:

- Angappan, R., Anderson, B. J., Vines, S. K., Sabine, S., (2019) From Drifts to Jerks: Characterizing Variations in the Core Field Globally with Iridium, AGU. Poster presentation, San Francisco, CA.
- Angappan, R., Anderson, B. J., Vines, S. K., Sabine, S., (2018) *Acceleration, Jerks, and External Signals: Global Characterization of Earth's Field on Sub-Annual Time Scales with Space Constellation Measurements*, AGU. Poster presentation, Washington D.C.
- Angappan, R., Anderson, B. J., Vines, S. K., Sabine, S., (2018) *Sub-Decadal Acceleration in Earth's Main Field*, Study of Earth's Deep Interior. Poster presentation, University of Alberta, Edmonton, Canada.
- Angappan, R. (2017) Assessment of Detrital Remanent Magnetization Preserved in Glacial Lacustrine Sediment for High-Resolution Correlation of the Lacustrine Sediment Record throughout the Puget Lowland, Undergraduate Research Symposium. Oral presentation, Mary Gates Undergraduate Research Symposium, University of Washington, Seattle, WA.

Publications:

- Angappan, R., Barik, A., Anderson, B. J., Vines, S. K., Sabine, S., (2020), A Wave Origin for the Global Structure of Geomagnetic Jerks, in preparation.
- Anderson, B. J., Angappan, R., Vines, S. K., Sabine, S., Barik, A., Bernasconi, P. N., Korth, H., Barnes, R. J., (2019), Satellite constellation data for study of Earth's magnetic field, in preparation.
- Perera, V., Mead, C., van der Hoeven Kraft, K., Stanley, S., Semken, S., Angappan, R., Husman, J., Barik, A., MacKenzie, S. and Buxner, S., (2019). Getting to the Heart of Diversity and Inclusion in the Geosciences. submitted. Previous archive version: <u>https://www.essoar.org/doi/10.1002/essoar.10500036.1</u>

Professional Affiliations:

American Geophysical Union (AGU), Student Member Mary Gates Foundation, Scholar