

CURRICULUM VITAE  
**Morgan Alexandria Carrington**

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EDUCATION

2022 – Present Ph.D. Geological Sciences – The University of Texas at Austin  
Advisors: Prof. Joel Johnson and Prof. Timothy Goudge  
2018 – 2022 B.S. Geology – University of California, Los Angeles  
Degree Awarded **June 2022** – GPA: 3.79

ACADEMIC AND RESEARCH EXPERIENCE

**Caltech WAVE Fellows Program – Advisor: Prof. Joann Stock** June 2020 – August 2020

- Conducted a research project using SAR image and altimetry data collected during the Venus Magellan mission to identify and map structural features (e.g., graben, trenches) as a means to determine if region is a site of subduction

**Jet Propulsion Laboratory Intern – Advisor: Dr. Suzanne Smrekar** January 2021 – August 2022

- Year-round internship: Currently conducting qualitative and quantitative research on stealth coronae using SAR image and altimetry data collected during the Magellan mission to identify, map, and analyze the relationship between topography and fracture annuli with a specific focus on topographic rims within the fracture annulus
- Secondly working to use results of research on stealth coronae as a foundation for composing a comprehensive coronae database to facilitate future work on both type 1 and type 2 coronae

**Field Research Assistant – UCLA GALE Lab – Advisor: Prof. Mackenzie Day** April 2021

- Aided in preparation of research project in Ibex Dune Field in Death Valley by weighing samples, placing and assembling experimental cubes of said weighed samples, placing sediment traps, and collecting data from weather stations

**Earth, Planetary, and Space Sciences Advising Office Assistant** September 2021 – June 2022

- Serve as the assistant to the Student Affairs Officer completing tasks such as assisting undergraduate students in the department with 2- or 4-year course plans, assisting in department course scheduling, and overseeing clerical tasks (e.g., filing, sorting, sending mail)

**Lab Assistant – UCLA SpinLab – Advisor: Prof. Jonathan Aurnou** February 2022 – August 2022

- Worked alongside fellow student researchers in the preparation and testing of Spike Lab software and methods to be utilized during future years of core computing course for geoscience students (EPSS 71)

AWARDS AND HONORS

**Deane Oberste-Lehn Summer Field Award** June 2021

- Awarded to undergraduate students in recognition of outstanding academic achievement to be used towards summer field work done during the required capstone course

**Dean's Honors List**

- Fall 2018 | Spring 2019 | Spring, Fall 2020 | Fall 2021 | Winter 2022 | Spring 2022

**Center for Diverse Leadership in Science (CDLS) Early Career Fellow** 2022 – Present

- 12-month fellowship awarded to encourage participation in collaborative research, community-engagement outreach, and career development trainings that aims to build community and foster diversity and inclusion in environmental science and other STEAM fields

**University of Texas at Austin Graduate School Fellowship** 2022 – 2023

- 12-month fellowship awarded by the Graduate School to supplement cost of tuition, insurance, and stipend

**National Science Foundation (NSF) Graduate Research Fellow** 2024 – Present

- 3-year fellowship awarded by NSF to recognizes and supports outstanding graduate students in NSF-supported science, technology, engineering, and mathematics disciplines who are pursuing research-based master’s and doctoral degrees at accredited United States institutions

### PEER-REVIEWED PUBLICATIONS

Sabbeth, L., **Carrington, M.A.**, and Smrekar, S.E., "Constraints on corona formation from an analysis of topographic rims and fracture annuli." Earth and Planetary Science Letters 633 (2024): 118568, <https://doi.org/10.1016/j.epsl.2024.118568>.

### CONFERENCE ABSTRACTS AND PRESENTATIONS

**Carrington, M.A.**, Goudge, T.A., Johnson, J.P.L., “Constraining geomorphic processes responsible for forming amphitheater-headed canyons on Earth and Mars”, Invited Poster, American Geophysical Union Fall Meeting 2023, Abstract # 1281421

**Carrington, M.A.**, Goudge, T.A., Johnson, J.P.L., “Constraining geomorphic processes responsible for forming amphitheater-headed canyons on Earth and Mars”, Invited Poster, American Geophysical Union Fall Meeting 2023, Abstract # 1281421

Sabbeth, L., **Carrington, M.A.**, Smrekar, S.E., “A new look at the relationship between fracture annuli and topographic patterns at Venusian coronae” Venus Surface and Atmosphere Conference 2023, Abstract # 8050

Sabbeth, L., **Carrington, M.A.**, Smrekar, S.E., “A new look at the relationship between fracture annuli and topographic rims and trenches at Venusian coronae”, Lunar and Planetary Science Conference 2022, Talk, Abstract # 2155

**Carrington, M.A.**, Sabbeth, L., Smrekar, S.E., “A New Look at Stealth Coronae on Venus”, Poster, American Geophysical Union Fall Meeting 2021, Abstract # 2220

**Carrington, M.A.**, “Possible Subduction in North Eastern Astkhik Planum, Venus,” Talk, Caltech Student-Faculty Program Seminar Day, 2020

### SPECIALIZED SKILLS

Computer Skills: Proficient in ArcGIS, Python, Matlab, Adobe Illustrator, Acrobat, Microsoft Word, Excel, PowerPoint

Languages: French – Beginner Speaker, Reader, and Writer, Novice Listener  
Korean – Beginner Speaker, Reader, and Writer, Novice Listener