

# BRANDON DURAN

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Ambitious student scientist interested in pursuing a PhD at the intersection of computation and Earth Science · Looking for roles involving scientific programming, along with mentorship and teaching opportunities, and eager to contribute to DEI initiatives in STEM.

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## EDUCATION

**Bachelor of Arts, Physics and Computer Science**, Georgetown University, GPA: 3.94/4.0

**August 2018-May 2022**

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## WORK EXPERIENCE

**NSF-REU Summer Researcher**, University of Hawai'i at Mānoa

**May 2021-August 2021**

- Developed website for accessing over 16,000+ scientific figures derived from ICESM (isotope-enabled Community Earth System Model) output
- Translated paleoclimate MATLAB code package to Python for improved shareability and incorporated cloud-based storage solutions

**MDI Scholar**, Massive Data Institute

**January 2021-May 2021**

- Produced code to conduct sentiment and emotion analysis on Iraqi tweets to support ongoing research and better prediction of forced migration
- Implemented Apache Spark into existing code to maximize efficiency and minimize computational costs through parallel processing

**Teaching Assistant**, Georgetown Department of Physics

**August 2020-Present**

- Collaborated with graduate students to guide students through introductory physics lab sessions (in-person and virtual)
- Hosted office hours to answer students' questions and help solidify concepts presented in lecture

**Teaching Assistant and Coursework Developer**, Georgetown Department of History

**January 2021-May 2021**

- Designed and developed multiple Tableau-focused data analysis assignments with step-by-step instructions and provided technical guidance and troubleshooting to students
- Updated and modified existing Python scripts to scrape Human Rights Court cases and UN Resolutions

**Student Assistant 1 and 2**, Lauinger Library Access Services

**September 2018-May 2020**

- Shelves, sorted, and retrieved books efficiently for patrons; managed execution of special projects with supervisors; assisted patrons at the circulation desk with borrowing material

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## OTHER EXPERIENCE

**Lead Programmer**, Brain and Language Lab, Georgetown University

**January 2021-Present**

- Created Python and R scripts to automate the scoring processes of different memory tests

**Peer Supporter**, Project Lighthouse, Georgetown University

**January 2020-Present**

- Conducted chat interactions on an anonymous peer-to-peer mental health support service

**Freelance Sports Writer**, Breakingthelines.com

**November 2016-Present**

- Wrote 15+ stand-alone articles, focusing on in-depth player reviews and highlighting the intersection of soccer and social issues

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## TECHNICAL SKILLS

**Languages:** Python, MATLAB, C++, R, Java, HTML, CSS, JavaScript

**Software:** Tableau, Git, GCP, Apache Spark

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## AWARDS AND PRESENTATIONS

**National Hispanic Scholar**, 2020/21 & 2021/22

**Cognizant Pathways in Technology Scholar**, 2021/22

**AGU Student Travel Grant Recipient**, 2021

**PIDGM – Paleo Isotopic Dynamics with a Global Model**, CUR Symposium (Oct '21) AGU Fall Meeting (Dec '21)