

Jose R Arita-Escalante

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EDUCATION

Virginia Commonwealth University

BS. MATHEMATICAL SCIENCES WITH A CONCENTRATION IN MATHEMATICS, CUM LAUDE

Richmond, VA | May 2022

Virginia Commonwealth University

BS. PHYSICS, CUM LAUDE

Richmond, VA | May 2022

RESEARCH EXPERIENCE

NASA GODDARD SPACE FLIGHT CENTER | POST-BACCALAUREATE RESEARCH ASSISTANT Greenbelt, MD
(Remote) | Jul 2022 - Present

- Works with Dr. Tyler Parsotan in optimizing the resolution of hydrodynamic simulations for Monte Carlo Radiative Transfer (MCRaT) radiative transfer calculations.
- Works with Dr. Tyler Parsotan in extending MCRaT radiative transfer calculations outside of the hydrodynamic simulation domains.

VCU GRAPH THEORY COMPUTATIONAL DISCOVERY LAB | RESEARCHER Richmond, VA | May 2022 - Jun 2022

- Researched Graph invariants and their connections to Knot Theory with Dr. Craig Larson, Dr. Allison Moore and Dr. Neal Bushaw.

VIRGINIA COMMONWEALTH UNIVERSITY | RESEARCH ASSISTANT Richmond, VA | Oct 2020 - May 2022

- Worked on Updating and Maintaining the Brain Graph Project by Dr. Craig Larson.

2020 VA-NC ALLIANCE SUMMER RESEARCH PROGRAM | RESEARCH ASSISTANT University of Virginia | Jun 2020 - Jul 2020

- Researched Bending Of Light In Exoplanet Atmospheres with the mentoring of Dr. Phil Arras

2019 VA-NC ALLIANCE SUMMER RESEARCH PROGRAM | RESEARCH ASSISTANT University of Virginia | Jun 2019 - Jul 2019

- Researched Bending Of Light In Exoplanet Atmospheres with the mentoring of Dr. Phil Arras

ACADEMIC WORK

VCU CAMPUS LEARNING CENTER | TUTOR Richmond, VA | Aug 2020 - May 2022

- Gave supplemental resources to students looking to reinforce topics covered in classes in various Physics and Mathematics topics.

VCU REMOTE LEARNING TOOLS PROJECT | STUDENT ADVISOR Richmond, VA | Oct 2020 - May 2022

- Worked along with the department of computer science to create a portal for students to engage in classes, participate and ask questions in a remote and/or synchronous manner.

SOCIAL WORK PROJECT HONDURAS 2016-2017 | VOLUNTEER TEACHER San Pedro Sula, Honduras | Oct 2016 - May 2017

- Worked as a volunteer along with a team to provide elementary education to adults who had not started or finished their elementary education in Honduras. Taught math class at the 4th grade level. Worked 120 hours of volunteering throughout the duration of the program.

CONFERENCES ATTENDED

SUPERCOMPUTING (SC) 2022 CONFERENCE | Nov 13 - 18 2022 Dallas, TX |

- Attended workshops and tutorials to learn about multiple supercomputing techniques.

CONFERENCIA DE LA IV SEMANA DE LA CARRERA DE ASTRONOMÍA Y ASTROFÍSICA (IV WEEK OF ASTRONOMY AND ASTROPHYSICS CAREER CONFERENCE) | MAY 31 - JUN 4 2021 Remote | Hosted by National Autonomous University of Honduras

- Presented Refracción en Atmósferas Exoplanetarias (Bending Of Light In Exoplanet Atmospheres).

LSAMP INDIANA ANNUAL UNDERGRADUATE RESEARCH SYMPOSIUM | OCT 3 2020 Remote |

- Presented Bending Of Light In Exoplanet Atmospheres.

2020 VIRTUAL LEADERSHIP ALLIANCE NATIONAL SYMPOSIUM (VLANS) | JUL 30 - AUG 1 2020 Remote |

- Presented Bending Of Light In Exoplanet Atmospheres.

235TH MEETING OF THE AMERICAN ASTRONOMICAL SOCIETY | JAN 4-8 2020 Honolulu, HI |

- Presented Bending Of Light In Exoplanet Atmospheres.

2019 SHENANDOAH UNDERGRADUATE MATH AND STATISTICS (SUMS) CONFERENCE | SEP 21 2019
James Madison University | Harrisonburg, VA

2019 NATIONAL ASTRONOMY CONSORTIUM (NAC) WORKSHOP | SEP 13-15 2019 Washington D.C. |

- Presented Bending Of Light In Exoplanet Atmospheres.

2019 LEADERSHIP ALLIANCE NATIONAL SYMPOSIUM (LANS) | JUL 26-28 2019 Hartford, CT |

- Presented Bending Of Light In Exoplanet Atmospheres.

11TH ANNUAL VA-NC UNDERGRADUATE RESEARCH SYMPOSIUM | OCT 14-15 2018 Virginia Tech |
Blacksburg, VA

CODING EXPERIENCE

Python and Sage Experience with Python and Sage in an educational environment and research environment

Mathematica Experience with Mathematica in an educational environment

MatLab Experience with MatLab in an educational environment

SKILLS

Languages: Highly proficient in the English and Spanish Language, written and spoken. Experience in professional interpretation between English and Spanish Language starting at the age of 15.