

PAMELA LARA

12021 Waterside Dr., El Paso, TX, 79936 | C: 915-781-3575 | pilara@miners.utep.edu

Summary

I am a PhD. Candidate for the Environmental Science and Engineering Program at the University of Texas at El Paso (UTEP). My field of interest is Atmospheric Physics, especially the study of black and brown carbon concentration in El Paso airshed. Beside the PhD. I am pursuing a double certification: Geographic Information System (GIS) and Big Data Analysis. The rationale behind these certifications is to become a more proficient and well-rounded scientist. I consider myself an enthusiastic learner, conscious reader, analytical thinker, resourceful scientist, and a goal oriented investigator.

Highlights

- Completed and passed Proposal Defense
- NCAS-M NERTO Internship with Atmospheric Composition and Climate Processes (ACCP) group located in the Chemical Sciences Laboratory (CLS) of NOAA in Boulder, CO
- PhD. Student for the Environmental and Engineering program at UTEP since August, 2019, GPA 3.7
- GIST Certification Program at the University of El Paso (UTEP), Fall 2018 – present
- Big Data Analysis Certification Program at UTEP, Spring 2019 - present
- Master of Science in Physics from the University of Texas at El Paso (UTEP), graduated August, 2018, 3.6 GPA
- Bachelor in Physics from Utah Valley University (UVU), graduated December, 2014, GPA 3.5
- 1.5 years of experience teaching Physics and Astronomy to High School students
- 4 years of experience teaching Physics and Astronomy Labs at UVU and UTEP
- Astronomy Researcher at Brigham Young University
- Discovered seven uncatalogued variable stars/star-systems with pending publications Through AAVSO (American Association of Variable Star Observers), as a first and second author
- Linux-IRAF data processing and light-curve analysis
- Transit Method for detecting Exoplanets in the Kepler Fields
- Poster Presenter at several Physics meetings such as CUWiP and 4-Corners
- Thesis research in the exciting field of Gravitational Waves: Differential Photometry of GW170817

Accomplishments

- Received a Graduate Excellence Award from the University of Texas at El Paso
- Awarded Best Poster for the Undergraduate Level presentation (at least 50 presenters), at the Four Corners section of the APS Physics meeting in October of 2012.
- Included in the Dean's List for 3.8 or higher GPA for 3 consecutive semesters.
- Honored at the UVU's 24th Annual President's Scholarship Ball as one of the scholarship-awarded student with the greatest academic/research achievements (only three students were honored among hundreds of recipients).
- Awarded Research Experience for Undergraduates, REU, for two consecutive summers at Brigham Young University Physics and Astronomy Department
- Successfully graduated with a Bachelor in Physics degree from Utah Valley University with 3.5 GPA.
- Accepted as an independent astronomy researcher by the prestigious astrophysicist Dr. Michael Jonev, professor at Brigham Young University

- Key Note speaker at TEDxUVU talk *Open Sky*, in 2015
- Subject of the main article at UVU Magazine *A Dreamer and the Open Sky*, Spring 2015
- Winner of the Graduate Student Research Expo 2016 at the University of Texas El Paso
- Successfully graduated with a MS. In Physics from the University of Texas at El Paso in August of 2018 (3.76 GPA)
- Accepted to PhD. Program at UTEP, 2019-2023
- Accepted to the NOAA NCAS-M two years program, through UTEP
- Accepted to a 12 Weeks Internship with the Atmospheric Composition and Climate Processes/Chemical Science Laboratory Of NOAA, Boulder, CO - Virtual

Experience

NCAS-M NERTO Internship with Atmospheric Composition and Climate Processes (ACCP) group located in the Chemical Sciences Laboratory (CLS) of NOAA in Boulder, CO – Virtual **Sept. 1, 2020 – Dec. 4, 2020**

Research Assistant to Dr. Rosa Fitzgerald **Aug. 2019 – Present**
University of Texas at El Paso

Astronomy Lab Assistantship **Aug 2016 to Aug 2018**
University of Texas at El Paso – El Paso, TX
 Teaching three courses of Astronomy Lab per semester since Fall of 2016

Physics and Astronomy Teacher **Feb 2015 to June 2016**
Rockwell Charter High School – Eagle Mountain, UT
 Taught Conceptual Physics, High School Astronomy, and Spanish

Independent Researcher **Aug 2012 to Dec 2014**
Dr. Michael Joner-BYU - Orem, UT
 For three consecutive summers worked independently as an astronomy researcher; data analysis; West Mountain Observatory operator (2014 Summer to present time); preparation of abstracts and papers for scientific publication; preparation of budgets for researches; presentations at scientific meetings such as CUWiP (Conference for Undergraduate Women in Physics, and 4C-APS Physics (American Physics Society, Four Corners section). Programming experience in C#, C++, and MATLAB in Linux and MS environment for the purpose of producing Light Curve graphs.

Planetarium Operator **Jan 2013 to Dec 2014**
Utah Valley University-Physics Department - Orem, UT
 Operated the full dome video graphics system “Digistar 4” including console and projector. Taught Astronomy Laboratory for 2 semesters and gave planetarium shows to youth/school age group as part of UVU outreach program. Coordinated presentations and shows with other UVU groups such as the Women in STEM, SAW, and Physics and Astronomy clubs.

Physics Grader **Jan 2012 to Dec 2014**
Utah Valley University-Physics Department - Orem, UT
 Grading student's homework; keeping student's records; tutoring students; keeping confidential information.

GROW/STEM Program Utah Valley University - Orem, UT As a program ambassador I visited different Jr and High Schools around Orem doing presentations and in general promulgating the STEM careers available here in Utah Valley University	Oct 2012 to Dec 2012
Summer Bridge Student Tutor Utah Valley University - Orem, UT Meeting in a classroom setting with our students; preparing tutoring sessions for the whole class; grading papers, homework, and test for the student; keeping and updating student's records and grades.	Jun 2014 to Aug 2014
Research Assistant for GEL High Altitude Balloons Utah Valley University - Orem, UT Preparing theoretical and practical applications for the research; field launching and recovering of high altitude balloons; team leader.	Feb 2014 to Aug 2014

Education

PhD. Environmental Science and Engineering University of Texas at El Paso, US	Fall 2019 – Present
Professional Master of Science: GIS Certification and Big Data Analysis Certification University of Texas at El Paso, TX, US	Fall 2018 – Present
M.S. in Physics University of Texas at El Paso- El Paso, TX, US	Summer 2018
Bachelor of Science, Physics Utah Valley University - Orem, UT, US With an 85% complete Co-Bachelor in Secondary Education in Physics at Utah Valley University.	Fall 2014
Law Universidad Central - Santiago, Region Metropolitana, Chile Graduated from Law School with incomplete Juris-Doctor Degree (bar-exam pending)	Fall 1997