ANNE DATTILO

Santa Cruz, CA \(\phi \) adattilo@ucsc.edu \(\phi \) github.com/aedattilo

EDUCATION

University of California Santa Cruz

2019 - 2024 (expected)

Ph.D. Student in Astronomy and Astrophysics

The University of Texas at Austin

2015 - 2019

B.S. Astronomy, with Honors (2019)

B.S. Physics, with Honors (2019)

RESEARCH POSITIONS

Graduate Student Researcher- University of California Santa Cruz

2019 - Present

Advisor: Natalie Batalha

Student Research Assistant- University of Texas at Austin

2017 - 2019

"Identifying Exoplanets in K2 Data with Deep Learning Techniques" (Advisor: Andrew Vanderburg)

Student Research Assistant- University of Texas at Austin

2016 - 2017

"Observing Eclipsing Binary Pairs" (Advisor: Mike Montgomery)

PUBLICATIONS

Dattilo, A., Vanderburg, A., et al. "Identifying Exoplanets with Deep Learning II: Two New Super-Earths Uncovered by a Neural Network in K2 Data", The Astronomical Journal, 156, 169 (2019).

Yu, et al. including Dattilo, A. "Identifying Exoplanets with Deep Learning. III. Automated Triage and Vetting of TESS Candidates", The Astronomical Journal, 158, 25 (2019).

AWARDS, FELLOWSHIPS, & HONORS

2019-2020 UCSC Regent's Fellowship

2019 Dean's Honored Graduate

2019 Jon Dahm Award for Excellence in Math, Physics and Astronomy

2019 College of Natural Sciences College Scholar

2019 Department of Astronomy Outstanding Senior Award

2018 Gulf Coast Undergraduate Research Symposium Astronomy & Physics Outstanding Presentation

2018 College of Natural Sciences College Scholar

Undergraduate Research Forum, UT Austin

2015-2019 Terry Scholarship

TALKS & PRESENTATIONS

* = invited *Talk: "Identifying Exoplanets with Neural Networks" Computational Astrophysics Summer School, UT Austin	May 2019
*Talk: "Exoplanet Detection Using AI" Dean's Scholars Friday Seminar, UT Austin	April 2019
Poster: "Identifying Exoplanets with Deep Learning	April 2019

Poster: "Identifying Transiting Exoplanets in K2 Data with Deep Learning Techniques" January 2019 Conference for Undergraduate Women in Physics, TAMUCC

Poster: "Identifying Transiting Exoplanets in K2 Data with Deep Learning Techniques" January 2019 233rd American Astronomical Society Conference

Talk: "Identifying Transiting Exoplanets in K2 Data with Deep Learning Techniques" October 2018 Gulf Coast Undergraduate Research Symposium, Rice University

Talk: "Identifying Transiting Exoplanets in K2 Data with Deep Learning Techniques" October 2018

Texas Astronomy Undergraduate Research Symposium, UT Austin

Poster: "Observing Eclipsing Binaries"

Undergraduate Research Symposium, UT Austin

April 2017

PRESS & MEDIA

Press Releases

· "Two New Planets Discovered Using Artificial Intelligence" Release by McDonald Observatory and University of Texas at Austin. March 26, 2019.

Radio & TV

- · "What Starts Here" Televised interview for the Longhorn Network. Aired Dec. 28, 2019.
- · "From College Student to Planet Hunter" YouTube interview by Google. Published Dec. 12, 2019.
- · "Young Astronomer Uses Artificial Intelligence To Discover 2 Exoplanets" NPR interview for *Morning Edition*. Aired April 1, 2019.

Press Coverage

· "UT Astronomers Find Two New Planets Using Artificial Intelligence" Featured in outlets including MIT Technology Review, FiveThirtyEight, Venture Beat, and UT Austin's "Research that Changed the World in 2019." March 26, 2019.

SERVICE & OUTREACH

Research Mentor

January 2017 - May 2019

Exploring the Universe with White Dwarf Stars, Freshman Research Initiative

- · Taught freshmen fundamental research skills such as programming and astronomical data reduction.
- · Led several student projects including observations of globular clusters, color-magnitude diagram creation, and categorizing white dwarf spectra.

Python Fundamentals Programming Workshop

September 2018

Undergraduate Women in Physics

· Designed a two part curriculum to teach students with little to no programming experience Python fundamentals.

Peer Mentoring

Fall 2016 - Spring 2018

Women in Natural Sciences

· Mentored freshmen women in math and science throughout their first year to help transition to college.