Nicholas Saunders

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1 4249 9th Ave NE Apt. #4 Seattle, WA 98105

EDUCATION

University of Washington, Seattle, WA

Sept 2013 -

- **B.S.** Astronomy and Comprehensive Physics Honors in Astronomy
- **B.A.** Comparative Literature: Cinema Studies
- Astronomy GPA: 3.7/4.0 | Comparative Literature GPA: 3.9/4.0

RELEVANT SKILLS

Data reduction and photometric analysis using IRAF and PyRAF; programming with python, java, Mathematica, LaTeX; public presentation of astronomy and physics

RESEARCH EXPERIENCE

LSST Citizen Science, Student Researcher

June 2017 -

University of Washington, Seattle, WA - advisor: Andrew Connelly

— Creating online project interface to identify and characterize transient objects in LSST data using Zooniverse citizen science web portal

Detection of Transiting Exoplanets, Student Researcher

Jan 2016 -

University of Washington, Seattle, WA – advisors: Rory Barnes, Rodrigo Luger

— Developing python algorithms to reduce instrumental noise for Kepler photometry and exoplanet transit detection

Planetary Science Intern

Apr 2011 – June 2013

The Bear Fight Institute, Winthrop, WA – advisors: Tom McCord, Bernard Nordmann

- Generated mosaicked satellite-imagery maps for surface of Mars and the Moon
- Analyzed composition of the Moon's surface using reflectance spectroscopy

ACADEMIC

Student Assistant, Astronomy Department

Jan 2017 -

EMPLOYMENT University of Washington, Seattle, WA

> — Grade assignments for upper-division astronomy course, lead planetarium presentations for students

OBSERVING EXPERIENCE

Manastash Ridge Observatory, Ellensburg, WA

July 2016

— Observed 10 full nights on 0.75m telescope, completed multi-band optical photometry and imaging, reduction and analysis with IRAF and python

Awards

Washington Newspaper Publishers Association

Oct 2016

— 1st Place: Best Video | 1st Place: Best Online Photo Essay

Sept 2013

Washington NASA Space Grant Scholarship Irving and Louise Donnergaard Endowment

Sept 2013

National Merit Scholarship Program, Commended Student

Sept 2012

PUBLICATIONS

N. Saunders, R. Luger (2017, in progress) Pushing the Limits of De-Trending with PLD.

R. Luger, E. Kruse, D. Foreman-Mackey, E. Agol, N. Saunders (2017) An Update to the EVEREST K2 Pipeline: Short Cadence, Saturated Stars, and Kepler-like Photometry down to $K_p = 15$. arXiv:1702.05488

PRESENTATIONS	231st American Astronomical Society Meeting, Washington	
	 N. Saunders, "De-Trending K2 Exoplanet Targets for High Spacecraft Motion" 	
	Astrobiology Mini Talks, Museum of Flight , Seattle, WA	14 Oct 2017
	N. Saunders, "The Search for Habitable Worlds"	
	Kepler/K2 Guest Observing Office, Mountain View, CA	12 Oct 2017
 N. Saunders, "Sputtering Effects on K2 Systematic 		val"
	UW Undergraduate Research Symposium , Seattle, WA	19 May 2017
	 N. Saunders, "Effects of Pixel Sensitivity Variation on K2 Exoplanet Detection" 	
	Washington NASA Space Grant Orientation, Seattle, WA Apr 2015 – Apr 2017	
	 Presented research and led planetarium shows for prospective UW students 	
	World Space Week, Seattle, WA	June 2016
	 Multiple public planetarium shows 	
SERVICE &	Undergraduate Liaison, UW Astronomy Faculty Board	Sept 2017 –
OUTREACH	 Attend faculty meetings, report undergraduate concerns, communicate with both faculty and students 	
	Volunteer Organizer, Astronomy on Tap Seattle	Jan 2017 –
	 Assist with setup and organization of astronomy outreach ev 	rent
	Volunteer Presenter, UW Planetarium	Nov 2015 –
	 Perform multiple shows each month for public and private audiences 	
GROUPS	Pulsar Kicks, UW Intramural Soccer	Mar 2017 –
Choors	UW League of Astronomers	Jan 2017 –
	SPACE (Students Pursuing Academic and Celestial Exploration)	Nov 2016 –
	Washington NASA Space Grant Consortium	Sept 2013 –
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OTHER	Barista – Tea Republik, Seattle, WA	ay 2015 – Mar 2017
EMPLOYMENT	Busser – Sun Mountain Lodge, Winthrop, WA Se	ept 2012 – Aug 2013
Swim Instructor and Lifeguard – Wagner Pool, Twisp, WA Jun 2010 – Aug 2012		

References available upon request.