

Nicholas Saunders

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| EDUCATION | University of Washington, Seattle, WA Sept 2013 – <ul style="list-style-type: none">— B.S. Astronomy and Comprehensive Physics – <i>Honors in Astronomy</i>— 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 – <i>advisor: Andrew Connelly</i> <ul style="list-style-type: none">— 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 – <i>advisors: Rory Barnes, Rodrigo Luger</i> <ul style="list-style-type: none">— Developing python algorithms to reduce instrumental noise for <i>Kepler/K2</i> photometry and exoplanet transit detection Planetary Science Intern Apr 2011 – June 2013 The Bear Fight Institute, Winthrop, WA – <i>advisors: Tom McCord, Bernard Nordmann</i> <ul style="list-style-type: none">— Generated mosaicked satellite-imagery maps for surface of Mars and the Moon;— Analyzed composition of the Moon's surface using reflectance spectroscopy |
| ACADEMIC EMPLOYMENT | Teaching Assistant, Astronomy Department Mar 2018 – University of Washington, Seattle, WA <ul style="list-style-type: none">— Lead multiple weekly in-class sections, teach introductory astronomy material, collaborate with team of T.A.s and professor, assist students in lab assignments Student Assistant, Astronomy Department Jan 2017 – Mar 2018 University of Washington, Seattle, WA <ul style="list-style-type: none">— Graded assignments for upper-division astronomy course, led planetarium presentations for students |
| OBSERVING EXPERIENCE | Manastash Ridge Observatory, Ellensburg, WA July 2016 <ul style="list-style-type: none">— Observed 10 full nights on 0.75m telescope, completed multi-band optical photometry and imaging, reduction and analysis with IRAF and python |
| AWARDS | UW Astronomy Department “Kudos of the Quarter” Feb 2018 Washington Newspaper Publishers Association Oct 2016 <ul style="list-style-type: none">— 1st Place: Best Video — 1st Place: Best Online Photo Essay Washington NASA Space Grant Scholarship Sept 2013 Irving and Louise Donnergaard Endowment Sept 2013 National Merit Scholarship Program, Commended Student Sept 2012 |
| PUBLICATIONS | N. Saunders, R. Luger, R. Barnes, (2018, in progress) <i>Pushing the Limits of De-Trending with PLD.</i> R. Luger, E. Kruse, D. Foreman-Mackey, E. Agol, N. Saunders (2017) <i>An Update to the EVEREST K2 Pipeline: Short Cadence, Saturated Stars, and Kepler-like Photometry down to $K_p = 15$.</i> arXiv:1702.05488 |

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| TALKS | Astronomy on Tap , Seattle, WA | 25 Apr 2018 |
| | — N. Saunders, “Putting the Science in Science Fiction” | |
| | 231st American Astronomical Society Meeting , Washington DC | 12 Jan 2018 |
| | — N. Saunders, R. Luger, “De-Trending <i>K2</i> 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, R. Luger, “Sputtering Effects on <i>K2</i> Systematics Removal” | |
| | UW Undergraduate Research Symposium , Seattle, WA | 19 May 2017 |
| | — N. Saunders, “Effects of Pixel Sensitivity Variation on <i>K2</i> Exoplanet Detection” | |
| | Washington NASA Space Grant Orientation , Seattle, WA | Apr 2015 – Apr 2017 |
| SERVICE & OUTREACH | — Presented research and led planetarium shows for prospective UW students | |
| | World Space Week , Seattle, WA | June 2016 |
| | — Multiple public planetarium shows | |
| | Undergraduate Liaison, UW Astronomy Faculty Board | Sept 2017 – |
| | — Attend faculty meetings, report undergraduate concerns, communicate with both faculty and students | |
| GROUPS | Volunteer, Total Solar Eclipse NASA Outreach Event | Aug 2017 |
| | — Organized educational outreach activities at a middle school on the Warm Springs Reservation, OR, assembled and managed telescopes for solar and planetary observation | |
| | Volunteer Organizer, Astronomy on Tap Seattle | Jan 2017 – |
| | — Assist with setup and organization of astronomy outreach event | |
| | Volunteer Presenter, UW Planetarium | Nov 2015 – |
| OTHER EMPLOYMENT | — Perform multiple shows each month for public and private audiences | |
| | Pulsar Kicks, UW Intramural Soccer | Mar 2017 – June 2017 |
| | UW League of Astronomers | Jan 2017 – |
| | SPACE (Students Pursuing Academic and Celestial Exploration) | Nov 2016 – |
| | Washington NASA Space Grant Consortium | Sept 2013 – |
| | Barista – Tea Republik, Seattle, WA | May 2015 – Mar 2017 |
| | Busser – Sun Mountain Lodge, Winthrop, WA | Sept 2012 – Aug 2013 |
| | Swim Instructor and Lifeguard – Wagner Pool, Twisp, WA | Jun 2010 – Aug 2012 |

References available upon request.