

## Arleth Z. Salinas

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940 W North Temple, Unit 612  
Salt Lake City, UT, 84116  
(434) 825-0435 - arleth.salinas@utah.edu

<b>OBJECTIVE</b>	Join the scientific computing and visualization research community to create new data tools to enable more robust scientific research. Complete my Ph.D. at the University of Utah.												
<b>EDUCATION</b>	University of Utah, Salt Lake City, UT Ph.D., Computer Science, Expected May 2028  The University of Chicago, Chicago, IL B.S., Computer Science, June 2023												
<b>AWARDS AND HONORS</b>	University of Chicago Odyssey Scholar, 2019 University of Chicago CAAP Scholar, 2019 DS4A Distinguished Scholar, 2020												
<b>SKILLS</b>	<i>Languages &amp; Software:</i> Python, Julia, C, JavaScript, HTML, JavaScript, CSS, Rust, MATLAB, Java, $\text{\LaTeX}$ , GitHub, Shodan, Visual Studio Code, Anaconda, Bash, Slurm, Spack, SQL <i>Operating Systems:</i> Linux, MacOS, Windows												
<b>EXPERIENCE</b>	<table><tr><td><i>Student Intern</i></td><td>September 2021-June 2023</td></tr><tr><td>University of Chicago Research Computing Center</td><td>Chicago, IL</td></tr><tr><td colspan="2"><ul style="list-style-type: none"><li>• Professionally answer help tickets, answer calls, and consult walk-ins from a user base of diverse computational backgrounds on supercomputer usage</li><li>• Guide users on issues such as RCC account creation and management, Slurm usage, Anaconda environment creation, Bash usage, file organization and transfer, and debugging of their code</li><li>• Install software onto Linux environment of supercomputers</li><li>• Assist computational scientist staff with their research by helping complete research tasks such as data cleaning and setting up and running machine learning experiments</li><li>• Creating new internal and external documentation website for RCC users and staff</li><li>• Onboard new student interns by teaching how to navigate RCC systems and how to handle support requests</li></ul></td></tr><tr><td><i>SULI Intern</i></td><td>June 2021-August 2021</td></tr><tr><td>Argonne National Laboratory</td><td>Remote</td></tr><tr><td colspan="2"><ul style="list-style-type: none"><li>• Implemented a rank-1 eigendecomposition routine in Julia and MATLAB</li><li>• Built a PCA routine using rank-1 updates with a fellow intern and with guidance from mentor</li><li>• Experimented with GPU for rank-1 eigendecomposition routine on Argonne machines via remote connection</li></ul></td></tr></table>	<i>Student Intern</i>	September 2021-June 2023	University of Chicago Research Computing Center	Chicago, IL	<ul style="list-style-type: none"><li>• Professionally answer help tickets, answer calls, and consult walk-ins from a user base of diverse computational backgrounds on supercomputer usage</li><li>• Guide users on issues such as RCC account creation and management, Slurm usage, Anaconda environment creation, Bash usage, file organization and transfer, and debugging of their code</li><li>• Install software onto Linux environment of supercomputers</li><li>• Assist computational scientist staff with their research by helping complete research tasks such as data cleaning and setting up and running machine learning experiments</li><li>• Creating new internal and external documentation website for RCC users and staff</li><li>• Onboard new student interns by teaching how to navigate RCC systems and how to handle support requests</li></ul>		<i>SULI Intern</i>	June 2021-August 2021	Argonne National Laboratory	Remote	<ul style="list-style-type: none"><li>• Implemented a rank-1 eigendecomposition routine in Julia and MATLAB</li><li>• Built a PCA routine using rank-1 updates with a fellow intern and with guidance from mentor</li><li>• Experimented with GPU for rank-1 eigendecomposition routine on Argonne machines via remote connection</li></ul>	
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- Completed a research report, peer review, and presentation on my research

*Metcalf Intern*

June 2020-August 2020

Argonne National Laboratory

Remote

- Conducted a literature review on cybersecurity issues that arose from the COVID-19 pandemic
- Collected and cleaned data on COVID-19 vaccine developers' cybervulnerabilities using Shodan and Excel
- Presented findings to peers and scientists in addition to writing various reports submitted to mentor

## COMMUNITY SERVICE

*Spanish Tutor*

September 2023-Present

Guadalupe School Adult Education

Salt Lake City, UT

- Teach personalized English lesson plan to students from diverse backgrounds every Tuesday for two hours at night.
- Identify areas for improvement in students during lesson and ensure student engagement with lesson materials by using dialogue, writing, and reading.
- Write down lesson results after completing each lesson for use by English Language Acquisition Specialist so they may plan the next lessons accordingly.

*Co-lead*

August 2022

AI for Movement Tracking Internship at RCC

Chicago, IL

- Co-lead and created a 2-week high school student internship about artificial intelligence
- Guided students through the process of collecting data, training, and evaluating machine learning models developed with DeepLabCut
- Prepared students to give 15 minute presentations on their research process and findings
- Taught AI at an introductory level through small lectures

*Volunteer*

July 2020

Coding for Science Camp at Argonne National Laboratory

Remote

- Guided students with debugging and testing their code
- Spoke on intern panel to high school students about my experience as an undergraduate intern at Argonne and about my college experience

## EXTRA-CURRICULAR ACTIVITIES

*Fellow*

October 2020-February 2021

Data Science for All / Empowerment

Remote

- Attended interactive lectures about data analytics every Saturday
- Completed independent projects in Python using real-world data analytics cases
- Completed group project collecting, cleaning, and analyzing data using Pandas that visualized important factors about electric vehicle presence in NY state
- Coordinated meetings among my team, with mentors, and communicated progress to TAs