

Arleth Z. Salinas

(434) 825-0435 - arleth.salinas@utah.edu

OBJECTIVE	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.												
EDUCATION	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												
AWARDS AND HONORS	University of Chicago Odyssey Scholar, 2019 University of Chicago CAAP Scholar, 2019 DS4A Distinguished Scholar, 2020												
SKILLS	<i>Languages & Software:</i> Python, Julia, C, JavaScript, HTML, JavaScript, CSS, Rust, MATLAB, Java, L ^A T _E X, GitHub, Shodan, Visual Studio Code, Anaconda, Bash, Slurm, Spack, SQL <i>Operating Systems:</i> Linux, MacOS, Windows												
EXPERIENCE	<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">• Professionally answer help tickets, answer calls, and consult walk-ins from a user base of diverse computational backgrounds on supercomputer usage• 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• Install software onto Linux environment of supercomputers• Assist computational scientist staff with their research by helping complete research tasks such as data cleaning and setting up and running machine learning experiments• Creating new internal and external documentation website for RCC users and staff• Onboard new student interns by teaching how to navigate RCC systems and how to handle support requests</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">• Implemented a rank-1 eigendecomposition routine in Julia and MATLAB• Built a PCA routine using rank-1 updates with a fellow intern and with guidance from mentor• Experimented with GPU for rank-1 eigendecomposition routine on Argonne machines via remote connection• Completed a research report, peer review, and presentation on my research</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">• Professionally answer help tickets, answer calls, and consult walk-ins from a user base of diverse computational backgrounds on supercomputer usage• 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• Install software onto Linux environment of supercomputers• Assist computational scientist staff with their research by helping complete research tasks such as data cleaning and setting up and running machine learning experiments• Creating new internal and external documentation website for RCC users and staff• Onboard new student interns by teaching how to navigate RCC systems and how to handle support requests		<i>SULI Intern</i>	June 2021-August 2021	Argonne National Laboratory	Remote	<ul style="list-style-type: none">• Implemented a rank-1 eigendecomposition routine in Julia and MATLAB• Built a PCA routine using rank-1 updates with a fellow intern and with guidance from mentor• Experimented with GPU for rank-1 eigendecomposition routine on Argonne machines via remote connection• Completed a research report, peer review, and presentation on my research	
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	<p><i>Metcalf Intern</i> June 2020-August 2020 Argonne National Laboratory Remote</p> <ul style="list-style-type: none"> • 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	<p><i>Spanish Tutor</i> September 2023-Present Guadalupe School Adult Education Salt Lake City, UT</p> <ul style="list-style-type: none"> • 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. <p><i>Co-lead</i> August 2022 AI for Movement Tracking Internship at RCC Chicago, IL</p> <ul style="list-style-type: none"> • 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 <p><i>Volunteer</i> July 2020 Coding for Science Camp at Argonne National Laboratory Remote</p> <ul style="list-style-type: none"> • 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	<p><i>Fellow</i> October 2020-February 2021 Data Science for All / Empowerment Remote</p> <ul style="list-style-type: none"> • 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