

ERICK ALVAREZ

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EDUCATION

UTAH VALLEY UNIVERSITY

Bachelor of Science

Major in Bioinformatics; Minor in Biology

Cumulative GPA: 3.56/4.0; Dean's List 2023-2024

Orem, UT

Expected May 2025

Biology, Associate in Science

Dec 2023

WORK EXPERIENCE

UTAH VALLEY UNIVERSITY

Supplemental Instruction Leader

Orem, UT

Aug 2023 – Present

- Teaches a supplemental course for College Biology I – covers biochemistry, energetics, cell biology, genetics, evolution
- Plans detailed sessions to facilitate student collaboration
- Collaborates closely with course professor; provides feedback to other SI leaders

UNIVERSITY OF MARYLAND INSTITUTE FOR ADVANCED COMPUTER STUDIES

BRiDGe REU Intern

College Park, MD

Jun – Aug 2024

- Data science research under Dr. Michael Cummings; funded by the NSF
- Cleaned data and performed network/statistical analyses to predict treatment outcomes at Baltimore substance-use disorder facilities; all code written in R

EARTHTEC ENGINEERING

Lab Technician

Lindon, UT

May – Jul 2023

- Responsible for daily laboratory testing of construction materials (soil, concrete, asphalt, etc.)
- Utilized basic math to perform tests and organized data records

RESEARCH EXPERIENCE

HJELMEN LAB

Aug 2024 – Present

- Bioinformatics research under Dr. Carl Hjelman on the correlation between organism complexity and genome size using insects

iGEM LAB

Jan 2024 – Present

- Synthetic biology research under Dr. Eric Domyan and Dr. Colleen Hough, engineering *Chlamydomonas reinhardtii* for nutrient removal to combat algal blooms
- Manages plasmid design, gene editing, GG assembly, transformations, and literature research of the *nosZ* gene
- Head of lab's community outreach and education; project to be presented at the 2024 iGEM expo in Paris, France

VOLUNTEER EXPERIENCE

S.P.A.R.K.S (Supporting Practical Achievement in Research and Knowledge in the Sciences)

Orem, UT

Vice President

Aug 2024 – Present

- Manages a STEM program preparing underrepresented/young students for grad school and the workforce through professional workshops; also responsible for administrative logistics and event organization

THE CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS

Mesa, AZ

Full-Time Representative/Social Media Specialist

Nov 2020 – Nov 2022

- 24-month representative for the LDS church; engaged in proselytizing, humanitarian aid, service, and community events
- Business admin of local Facebook page (~19k followers); managed a monthly budget (\$4k) and created ads; trained other missionaries and managed both online and community events

NEUROSCIENCE ACADEMIC SOCIETY

Rexburg, ID

Outreach Coordinator

Sep 2018 – Apr 2019

- Coordinated teaching opportunities with local schools for BYU-Idaho; taught scientific principles to high school students

ADDITIONAL

Technical Skills: Proficient in R, Python, SQL, BLAST; Familiar with Linux

Languages: Fluent in English and Spanish