Zach Eliason

Bioinformatician with strong computational skills and expertise in genomics and cancer immunology research. Enjoys deep learning approaches and coding solutions to real-world problems.

EDUCATION

BRIGHAM YOUNG UNIVERSITY, COLLEGE OF LIFE SCIENCES | Provo, UT

B.S. Bioinformatics, Minor in Computer Science Dec. 2023

GPA: 3.99/4.0, Major GPA: 4.0/4.0

+ 2022 Amgen Scholar, Washington University in St. Louis
+ Recipient of 4 year full-tuition university scholarship
+ College of Life Sciences Dean's List (top 5%)

BIOINFORMATICS WORK EXPERIENCE

BIOINFORMATICS INTERN | *May 2023—Aug. 2023*

Zayt Bioscience Berlin, Germany

+ Developed and assessed 100+ novel synthetic promoters using state-of-the-art deep learning to enhance protein production in gene expression experiments
+ Built custom BLAST-guided DNA alignment pipeline to facilitate comparative analysis of target genes across over 100 fungal species

BIOINFORMATICS RESEARCH ASSISTANT | *Jun. 2022—Aug. 2022*

Zhang Lab, Washington University St. Louis, MO.

+ Led team of 3 on HLA genotyping research project for improving cancer outcomes
+ Designed and implemented novel genotyping tool achieving over 90% accuracy
+ Conducted literature review in order to compile paper for publication

DATA MANAGER & RESEARCH ASSISTANT | *Jan. 2021—Apr. 2022*

Abbott Lab, BYU Provo, UT.

+ Analyzed hydrology time series spanning 3+ years to advance conservation efforts
+ Oversaw and trained 10+ computational assistants to maintain database integrity
+ Orchestrated bi-monthly lab meetings to ensure communication and organization
+ Designed data cleaning and correction tools for large data sets in use by 12+

BIOINFORMATICS RESEARCH ASSISTANT | *Apr. 2021—Apr. 2022*

Piccolo Lab, BYU Provo, UT.

+ Led team of 10 in study of publication trends to advance pedagogical methods
+ Created data visualizations, ran analyses, and oversaw manuscript for publication
+ Designed, built, and tested web tool for teaching and evaluating bioinformatics students used by 4 professors and 100+ students

CONTACT

(801) 310-3251
eliasonzach@gmail.com
github.com/zacheliason
linkedin.com/in/zacheliason

SKILLS

PROGRAMMING

+ **Languages:** Python, R, C++, SQL & NOSQL databases, Bash (Unix Shell), web programming
+ **Version Control:** Git

DEEP LEARNING

+ **Frameworks:** PyTorch
+ **Architectures:** CNN, RNN, VAE, GAN, transformer

DOMAIN KNOWLEDGE

+ Genetics, genomics, biology, statistics
+ BLAST, de novo and reference genome alignment

OTHER

+ Adobe Creative Suite, proficiency in Russian language, initiative, teamwork

Last updated 07-22-2023. View this resume online at zacheliason.com/resume.pdf