# Annika Jorgensen

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### EDUCATION

Arizona State University Tempe, AZ MS Biology: Computational Life Sciences, GPA: 3.97 2023-2024

Tempe, AZ Arizona State University 2019-2023 Magna Cum Laude Honors BS Biophysics, GPA: 3.60

# TECHNICAL SKILLS

- R and RStudio: Proficient in statistical programming, specializing in bioinformatics and biostatistics
- Python and MATLAB: Skilled in use of IDE and writing code for scientific computing
- Bash: Strong command of shell scripts for system automation and administration with SAM/BAM files
- Git: Extensive experience in version control and collaborative software development workflows
- **SQL:** Familiar with database management, query optimization, and data manipulation
- Biostatistics: Adept at utilizing statistical tests to analyze and interpret complex biological datasets

- Quality Assessment: Trained in ensuring data integrity and reliability through rigorous quality control and preprocessing techniques using FASTQ
- Data Visualization: Experienced in creating statistical visualizations that are easily understood by nonscientists
- Sequence alignment and Variant Calling: Strong background in analyzing high-throughput sequencing data to identify genetic variations and make biological insights.
- Molecular Biotechnology: Familiar with laboratory techniques including NGS, PCR, and genetic engineering

#### Work Experience

# Bioinformatics Programmer-Dr. Xin Sun & Dr. Allen Wang

San Diego, CA

- Xin Sun Lab & Center for Epigenomics
  - Analyze RNAseq and ATACseq data
  - Conduct statistical methods on biological data

- Employ software tools to interpret biological data

- Debug computer programs
- Maintain webages
- Documents changes to operational systems

# Graduate Research Assistant-Dr. Melissa Wilson

Sex Chromosome Lab

 Statistically analyzed sex-differential expression of genes with RNA-seq data

- Implemented biostatistical methods in R including multivariate regression, principal component analysis, and hypothesis testing

Tempe, AZ - Developed computational biology curricula for an undergraduate class

Queried the Reactome database and performed

hypergeometric overrepresentation analyses

#### Commercial Intern

Civica Rx

- Designed and Maintained drug sales databases

Queried large databases with Tableau

- Created government official datasheets in Excel
- Drafted sales agreements for hospital partners

Summer 2020-Spring 2021

November 2021-May 2024

Lehi, UT

July 2024- Present