Elliot Martin

Bioinformatician

Bioinformatician: SOPHiA Genetics
Field: Bioinformatics, Software Development, Data Science
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Summary

- Developed 15+ custom NGS pipelines for renowned hospitals and testing labs
- Aided PI to achieve over $2,000,000 in NIH grant funding by establishing bioinformatics pipelines to facilitate the research of dozens of team-members
- Spearheaded a productive multi-year research project, managing and effectively communicating with several team-members from different disciplines

Education

Ph.D. in Biology - Albany, NY — Aug. 2015 - Mar. 2022

- Thesis: Post-transcriptional control underlies germline stem cell differentiation and entry into meiosis in the female Drosophila.

Bachelor of Science, Biochemistry - Geneseo, NY — Aug. 2011 - May. 2015

Experience

Bioinformatician - SOPHiA Genetics — Apr. 2022 - Present

- Design, release, evaluate, and document targeted gene panels and analysis pipelines to effectively identify clinically relevant genomic alterations
- Analyze and summarize various types of NGS data to clients (e.g., SNPs/INDELs, CNV, RNA fusion, and PGx alleles).
- Communicate pipeline performance results to external clinical partners

Graduate Assistant - University of Albany — Aug. 2019 - Mar. 2022

- Established bioinformatics pipelines and scripts that are utilized by non-programmers to allow dozens of team-members to rapidly process data
- Developed interactive browser-based tool to increase the accessibility of bulk RNA-seq and single-cell seq data
- Discovered RNA regulatory mechanisms

QC Virology Bioinformatics Intern - Regeneron Pharmaceuticals Inc. - Remote — Jun. - Aug. 2020

- Established bioinformatics pipelines for Nanopore direct RNA-seq for differential gene expression and differential isoform usage
- Developed an R Shiny application for non-bioinformaticians to process their data

Teaching Assistant - University of Albany — Aug. 2015 - May. 2019

- Taught basic introductory lab skills to undergraduates and distilled principles of genetics and fostered discussions on genetics and ethics

Skills

- Programming languages: Adept in R, proficient with Bash, experience in C and Python
- Proficient with Data analysis and visualization, Linux, HPCC/Azure, Docker, Rmarkdown/Quarto, LaTeX, version control (Git), Jira, and Gitlab
- Experienced in cell culture and related techniques such as RNAi, transfection, and viral work
- Skilled with molecular techniques including western blotting, qPCR, RNA work, and cloning