

Sedat Demiriz

778-866-9440 - sedatdemiriz97@gmail.com - sdemiriz.github.io

Experience

Computational Biologist - *Sequence Bio Inc.*

Jul '21 – Nov '23

Lead the development of GWAS and ROH analysis pipelines with a focus on scalability and reproducibility
Derived disease associations by analyzing data from company's Newfoundland population cohort
Combined public and company datasets to derived insights into founder population genetics signature

Research Programmer - *BC Genome Sciences Center*

Nov '20 – Mar '21

Performed quality control of incoming clinical oncopanel wet lab data by NGS data quality metrics
Streamlined existing quality control and visualization scripts and configured for reusability
Assisted graduate students with applying computational approaches to research questions

Biosensor R&D Co-op Programmer - *CiBER Lab, SFU*

May – Sep '18

Automated sensor response data processing and generation of easily digestible visualizations
Performed collection of data from hundreds of sensor instances during development
Presented and implemented metrics for determining sensor instance success based on response pattern

Genetics Co-op Student - *Istanbul University Genetics Institute*

May – Aug '16

Carried out clinical PCR, DNA and RNA isolation and sample quality control procedures
Worked routinely in cell culture laboratory to grow five varieties of tumor cell populations for lab use
Lead had supported four other co-op students during their first month with the lab

Skills

Experience implementing robust genomics data processing workflows using pipeline utilities
Experience working with general population cohort data, identifying phenotype-genotype associations
Fluent in Python, R, and Bash for data analysis, transformation and visualization tasks
Applying good software development practices: version control, unit testing, documentation
Querying SQL databases and unstructured public health data sources

Education

BSc Joint Major Mol. Biology and Biochem. & Comp. Sci. - *Simon Fraser University*

'15 – '20

Computing Science: Data Science, Machine Learning, Databases, Algorithms
Molecular Biology: Bioinformatics, Human Genomics, Applied Wet Labs
Statistics: Exploratory Data Analysis, Experimental Design and Analysis

Publications

one

two