Aris Grout
Data Scientist

ma / aris.grout@gmail.com
ph / 604.908.1893
gh / arisgrout
in / arisgrout

Analytical Work Experience

Systems Analyst & Designer / Community Health IT

Sep 2018 – Present / PHSA, Burnaby BC

- Gathered clinical requirements for provincial eWound electronic health records (EHR) system upgrades: facilitating user-group discussions and liaising with developers to launch new features.
- Analyzed reported problems, designed corrective system logic, and worked with developers to test and deploy solutions.
- Created our first self-paced eLearning module for clinicians learning the eWound EHR system.
- Scripted and automated delivery of business reports to clinics in SQL & Powershell.

Research Associate / Cardiac Differentiation

Jan 2017 – Oct 2017 / SFU (Honors Degree), Burnaby BC

- Researched, designed and performed a CRISPR-Cas9 mediated knock-out of a gene highly associated with lone atrial fibrillation in human induced pluripotent stem cells (hiPSCs).
- Assisted the development of an in-house atrial-like cardiomyocyte differentiation kit; methods and procedures.
- Performed DNA isolations, PCR amplifications, molecular cloning, fluorescence-activated cell-sorting (FACS), hiPSC transfections, and genomic analysis.
- Wrote and defended an honours thesis featuring the CRISPR-Cas9 mediated gene knock-out.

Research Associate / Neural Differentiation

Sep 2015 – Apr 2016 / STEMCELL TECHNOLOGIES (Co-op), Vancouver BC

- Designed and optimized experimental protocols to differentiate human stem cells (hiPSCs/ESCs) into neural cell types
- Collected and graphed culture expansion data in Excel to track efficacy of differentiation procedures.
- Analyzed differentiated state of cell cultures using fluorescence-activated cell sorting (FACS), immunostaining and RT-qPCR.
- Presented weekly PowerPoints to colleagues, detailing experimental results, conclusions and follow-up.

Project Management Experience

Executive Director / TEDxSFU

May 2018 – Apr 2019 / SFU Student Society, Vancouver BC

Co-President / SFU Dance Marathon (Nonprofit)

Jun 2015 – Aug 2016 / SFU Student Society, Burnaby BC

Data Stack

/ Wrangling:

`PostgreSQL` `SQL Server` `APIs` `Python • pandas`

/ Visualization:

`Python • matplotlib • seaborn • plotly`

/ Modeling:

`Python • tensorflow • apache spark` `• scikit-learn • statsmodels`

/ Deployment:

`Google Cloud` `AWS` `Python • flask • streamlit`

/ Scripting:

`Bash` `PowerShell`

Data Projects

/> **Research SNPit**: AI-generated summary of research. Unique to your genome.

/> **Flight Delay Prediction**: A random-forest model for predicting US flight delays.

/> **Banking Behavioral Clustering**: Unsupervised clustering and analysis of banking customers.

/> **English to French Translator**: Text-based NLP model applying an ensemble of RNNs.

Education

Hon. BSc / Molecular Biology & Biochemistry
2014 - 2018 / Simon Fraser University, BC

Certificate / Genomics
2016 - 2018 / Simon Fraser University, BC

Certificate / Innovation & Entrepreneurship
2016 - 2018 / Simon Fraser University, BC

Certification

Diploma / Data Science Full-Time Bootcamp
2021 - 2021 / Lighthouse Labs

Associates / Project Management (CAPM)
2020 / Project Management Institute