def **Erin_Gill_PhD**

(data_scientist, *args, *kwargs):

Data Scientist familiar with gathering, cleaning and presenting data for use by technical and non-technical personnel. Advanced understanding of statistical, algebraic and other analytical techniques. Highly organized, motivated and diligent with significant background in research methodology.

def experience(start_date, end_date, description):

Simon Fraser University, Burnaby, BC — *Research Associate*

FEB 2020 - PRESENT

- Troubleshooting problems using a breadth of computational and statistical knowledge for implementation of best practices and expanded improvement initiatives.
- Developed and deployed a PostgreSQL database on AWS RDS to store Canadian SARS-CoV-2 case and sequencing information.
- Developed and deployed an interactive dashboard on Heroku that implements an ETL pipeline to display live Canadian SARS-CoV-2 case and vaccination data [1].
- Developed a ML software package in Python that automatically detects outliers in longitudinal data using multiple statistical strategies and forecasts future timepoints.
- Analyzed BC socioeconomic and COVID-19 vaccination data from multiple sources. Built and evaluated linear regression models to determine factors influencing vaccine uptake.

IMV Inc., Dartmouth, NS— *Research Scientist*

FEB 2019 - SEB 2019

- Analyzed gene expression data from clinical trial participants and produced actionable insights for drug mechanism of action.
- Led team of 5-6 research associates in vaccine development projects and successfully met all key milestones.

R.E.W. Hancock Lab, University of British Columbia, Vancouver, BC— *Research Associate and RNA-Seq Program Manager*

JAN 2014 - APR 2018

- Supervised bioinformatics and RNA-Seq programs and maintained international collaborations.
- Built and improved pipelines for breaking down and analyzing complex data.

def contact_information():

Address
Coquitlam, BC, V3B 0N2

Phone
(778) 230-5237

email
erin.gill81@gmail.com

def skill_overview():

Python

R

SQL

HTML/CSS/Bootstrap

Data Visualization

Machine Learning

Statistics

Database design

Data Analytics

def online_profiles():

Twitter
@MakeMyDNA

LinkedIn
www.linkedin.com/in/erin-e-gill-phd

Github
https://github.com/eringill

Website
https://eringill.github.io

- Utilized machine learning approaches to identify sets of genes driving disease etiology.
- Developed a novel algorithm to identify gene expression signatures associated with diseases that have overlapping symptomologies, thus enabling greater diagnostic accuracy. This work has been published [2].

Indel Therapeutics, Inc., Vancouver, BC— *Postdoctoral Intern - Virtual Screening (Drug Development)*

AUG 2012 - NOV 2013

- Performed *in silico* ligand docking with protein structures to select small molecules with antimicrobial activity for *in vitro* testing.
- Identified potential antimicrobial drug targets computationally, reducing the time spent on downstream activities by orders of magnitude.

F. Brinkman Lab, Simon Fraser University, Burnaby, BC— *Postdoctoral Researcher / Project Manager*

FEB 2009 - JUL 2012

```
def education(start_date, graduation_date,
degree, major):
```

University of British Columbia, Vancouver, British Columbia — *Doctor of Philosophy: Genetics*

SEP 2004 - MAR 2009

Dalhousie University, Halifax, Nova Scotia — *Bachelor of Science: Biochemistry and Biology*

SEP 1999 - APR 2004

```
def tech_community_outreach(start_date,
end_date, description):
```

Co-leader of Codecademy Vancouver Code Projects Chapter

MAY 2021 - PRESENT

- Hosting meetups to teach less-experienced individuals how to code [3].
- Developing online resources that enable learners to work at their own pace.

```
def publications():
```

- I have co-authored 27 peer-reviewed publications. They can be viewed here [4].

```
def references_&_links(number, url):
```
[1] https://canadacoviddashboard.herokuapp.com/

[2] https://pubmed.ncbi.nlm.nih.gov/33692808/

[3] https://community.codecademy.com/vancouver-code-projects/

[4] https://tinyurl.com/38yft8hx