

Rishi Shah

Software Developer

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⚙️ Technical Skills Summary

Languages: Python, C++, Java, JavaScript, PostgreSQL, R, HTML/CSS, bash

Frameworks: Django, Flask, React, Node.JS

Tools/Libraries: Git, JIRA, Docker, Jenkins, Linux/MacOS CL, Pandas, numPy, Matplotlib, SciKitLearn

💻 Experience

Bioinformatics Developer

Aug. 2020 – Dec. 2020

Ontario Institute for Cancer Research

Toronto, CA

- Updated and integrated a REST API in node.js to mark files for data release approval in the pipeline, increasing volume and efficiency 300%
- Created a COVID-19 workflow to analyze sequenced data while creating a json metrics file, graphs, charts and a pdf report in Python. Reduced time-to-completion by 5 hours
- Designed and produced various Python, R and bash programs to upgrade and re-implement proprietary legacy code, leading to operation times cut by 50% and a 25% reduced codebase
- Adeptly worked in an AGILE team, while creating documentations, bug reports & tickets in JIRA, Jenkins tests and deployed 7 different projects to production

Bioinformatics Programmer

Jan. 2020 – Apr. 2020

Ontario Institute for Cancer Research

Toronto, CA

- Integrated various programs and software together to run in a workflow using wdl, helping increase the speed of the pipeline by 70%
- Worked on installing software in docker containers so that collaborators around the world can replicate cancer research
- Created and modified R, Python and Bash scripts to create metrics data from cancer data files. Reported data to 4 new dashboards and increased the rate of analysis by 50%

🔧 Projects

Purchase Analyzer

Python, Pandas, Numpy, SciKitLearn, sqlite3, Matplotlib

- A Python program that analyzes credit card purchases and stores data in a sqlite3 db using a pandas dataframe
- Uses a natural language processing engine to determine which category the purchase falls into by web-scraping the description of the merchant
- Leverages matplotlib/plotly for charts, graphs & a map of the transaction locations using an API

COVID-19 API & Visualizer

Flask, Python, Pandas, sqlite3, Matplotlib

- Web-scraping csv files from the government websites and storing them in a database
- Using flask to create an API which reports back 16 data-fields and can be constrained by date

Finance Blog

Django, Python, JavaScript, HTML/CSS, sqlite3

- A django project to inform university and college students about personal finance and investing

Personal Website

Django, Python, JavaScript, HTML/CSS, sqlite3

- A website to highlight my work and experience written in django as back-end and HTML/CSS as front-end

🎓 Education

University of Waterloo

2019 – 2024

BaSc in Honours Computer Engineering, Coop

Waterloo, CA

- Term GPA: 3.9
- Notable Courses: Algorithms and Data Structures, Fundamentals of Programming, Speech & Communication