Dear Hiring Authority   Tuesday, July 2, 2024

   In my next Role I'm hoping to combine my extensive experience as molecular biologist in drug discovery along with my knowledge, interest and excitement to use computational tools.

   I have also conducted research on several disease states and their biological underpinnings. This involved attention to detail, trouble shooting and good communication skills. In support of my Assay Development efforts at Amgen and Caraway, I used scripting languages to read manipulate and visualize High dimensional data in an automated way. This allowed for the advancement of projects by developing and producing data at a rapid pace.

   Since the downturn in the biotech industry, I have been keeping abreast of new technologies thru online learning. The following slides have summarized that experience. As with my previous employment, I would bring a can-do attitude to your organization and look forward to leveraging these skills to achieve your departmental goals. Thank you for your time and attention.

Sincerely

Jabbar Campbell

NGS

Certification	Area	Topics	Tools
✔	[Next Generation Sequencing](#)	Extraction---QC---RNA/CDNA---library prep—end repair Amplification types (Emulsion vs Bridge) Platforms (Seq by ligation, Ion torrent semiconductor , Illumina Reversible terminator) Variant analysis(indel SNPS)	NGS Overview
✔	[Functional Genomics (Microarray to RNA-Seq) Data Analysis](#)	Raw read---QC---Trimming—alignment—reporting Microarray analysis	NCBI, Linux, E-util, SRA tools (fastqc, bowtie, samtools, htseq) GEO2R
✔	[Case Studies in Functional Genomics	edX](#)	Raw read---QC---Trimming—alignment—reporting Poisson and negative Binomial distributions Epigentics/ Methylation (illumina 450, Bisulfate ,CHIP-seq)	Linux, TCGA, GEO Bioconductor (Star, Deseq, Limma, Minifi, Bumphunter)
…in progress	[Genomics in the Cloud](#)	HPC, Google Cloud, Virtual machines, mounting buckets, Containerization, Variant calling (*.vcf), reference mode (*.qvcf), duplicates, BSQR, VQSR, joint vs single sample calling	Gsutil, docker, gatk, spark, IGV
NA	[Getting started — Nextflow 23.10.0 documentation](#)	Raw read---QC---Trimming—alignment--reporting	NEXTFLOW(~BASH)
NA	NEXTFLOW summit	Building a pipeline, containerization	Nextflow, nf-core
NA	[Nextgenerationsequencinghq.com](#)	Raw read---QC---Trimming—alignment--reporting	SRA, FastQC, EA-utils, MIXCR R(immunoarach)

Data Science

Certification	Course	Topics	Tools
✔	Udemy Course The Git & Github Bootcamp		GitBash
✔	Udemy Course Bash Scripting and Shell Programming (Linux Command Line)		BASH
✔	Course: Data Engineering for Beginners with Python and SQL | Udemy	Python, SQL, API's	VsCode, Python review, SQL (postgres, sql-shell) APACHE(KAFKA,PULSAR,AWS-KINESIS) Postman(API)
✔	Git Lab CI: CI/CD and Devops for Beginners| Udemy	Web/cloud deployment, yaml pipelines in gitlab, containerization, AWS, beanstalk, java, Unit testing	YAML, json, surge.sh, Gatsby, node,js, postman, gradle, newman
✔	Python Programming GUI, Database and System Design | Udemy	Common data types, case logic, looping, functions, class objects, inheritance, GUI interfaces, System Design	Python, Tkinter, Primordious, SQLlite

Machine Learning

Certification	Course	Topics	Tools
✔	[Introduction to vector databases using Milvus	Udemy](#)	Milvus (Vector Databases), PyMilvus commands, retrieve and generate vector embeddings on raw image or text data for similarity searches.	Pymilvus, tensorflow, Pytorch, API
✔	[HarvardX|Data Science and Machine Learning](#)	BAYESIAN Statistics, Prediction Regression LOWESS, cross validation, KNN models, Monte Carlo simulations & Bootstrapping Linear discriminant Analysis Matrix Decomposition(SVD)	R (caret)
✔	[Pytorch Basis for Machine learning| edX](#)	Tensors derivatives linear and logistic regression	Pytorch
✔	[Deep Learning Fundamentals with Keras](#)	Neural Network architecture, input functions, Node Activation functions, convolution networks, recurrent networks, Deep learning autoencoders	Keras, Pytorch, Tensorflow

Project Experience by Company

Company	Area	Project	Tools
Academia	Neuroscience	DNA cloning, genotyping	NCBI Blasts, PCR oligos
Amgen	Neuroscience	High Content Imaging, Histology	Gene data Screener
		HTS- electrophysiology	R
		HTS - FRET	R, Python, SHINY
Caraway	Biomarker Discovery	HTS-High Content Imaging and ELISA	R, Python (seaborn) SHINY
		RNA-Seq	R, Bioconductor, (GEO2R, QUASR, DESEQ2,) AWS
		Mass Spec	R, Bioconductor (ViseoGO)
		Lipidomic	R, Bioconductor (indeed)
		3d Organoid Cyst Swelling	R (EBImage)

Community and Events