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 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)
NA	Genomics in the Cloud	HPC, Google Cloud, Virtual machines, mounting buckets, Containerization, Variant calling (*.vcf), reference mode (*.qvcf), BSQR, VQSR, joint vs single sample calling, Workflows for… Germline vs Somatic Variants, Copy Number Variants, Parellization	Gsutil, Docker, GATK, Spark, IGV, Cromwell, wdl, json, PAPI, TERRA
NA	Getting started — Nextflow 23.10.0 documentation	Raw read---QC---Trimming—alignment--reporting	NEXTFLOW
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 and Machine Learning

Certification	Course	Topics	Tools
…in progress	Statistics in R	Quantiles, Normal Distributions, Skew, QQplots, p Values	R
✓	Introduction to vector databases using Milvus | Udemy	Milvus (Vector Databases), PyMilvus commands, generation and storage of vector embeddings from raw image or text data for similarity search	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 Basics for Machine learning| edX	Tensors, Derivatives, Gradient Descent, Linear , Nonlinear 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

Engineering

Certification	Course	Topics	Tools
✓	Udemy Course The Git & Github Bootcamp	Git Syntax	GitBash
✓	Udemy Course Bash Scripting and Shell Programming (Linux Command Line)	Bash and Linux Syntax	BASH
✓	Course: Data Engineering for Beginners with Python and SQL | Udemy	Creating in a Python interactions with a SQL database thru an API	VsCode, Python review, SQL (postgres, sql-shell) APACHE(KAFKA,PULSAR,AWS-KINESIS) Postman(API)
✓	Git Lab Cl: 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

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)
…in progress	Neuroscience	ALS Pathology Imaging	Milvus, Pymilvus, Pytorch

Community and Events