



Jabbar Campbell
Candidate

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 Epigenetics/ 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	Gsutil, docker, gatk, spark
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, SQLite

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
In progress	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

Workshop: Charting human biology using AI for Precision Health & Precision Medicine



Location

238 Main Street, Cambridge, MA, 02139

6th floor conference space where [Bayer's](#) office is located.

You shared feedback on April 30. Your feedback helps make the Meetup experience better for everyone.

DNAnexus®

 **Boston Computational Biology and Bioinformatics Meetup**
Public group

📅 Thursday, April 18, 2024
6:00 PM to 8:00 PM EDT
[Add to calendar](#)

📍 Portico Brewing
101 South St - Somerville, MA
How to find us
Look for a friendly group of nerds near the BCBB sign.

[Event Chat](#)



Boston Computational Biology and Bioinformatics Meetup

📍 Cambridge, MA, USA

👤 3,785 members · Public group

👤 Organized by [Matthew Eaton](#) and 5 others

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