



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) |
| ...in progress | Genomics in the Cloud | HPC, Google Cloud, Virtual machines, mounting buckets, Containerization, Variant calling (*.vcf), reference mode (*.qvcf), duplicates, BSQR, VQSR | 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, 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 |
| ✓ | 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.

DNAexus®

 **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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