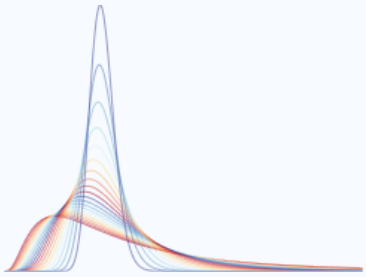
ABBAS RIZVI, PHD

I am a PhD data scientist and computational biologist. I have strong experience doing data science end to end. From data retreival, to data preparation (tidying, reshaping), to exploratory data analysis (visualizations, descriptive statistics), to predictive modeling (machine learning/statistical modeling), to packaging and deployment (using docker as http web services or cloud deployment). I have a strong knowledge base of molecular, cell biology, genetics, and bioinformatics. I am deeply experienced with the R programming language and given talks at Bioconductor and useR on my open source contributions.



EDUCATION

2019 | 2015

PhD., Pharmaceutical Sciences

The Ohio State University — Columbus, OH

- Dissertation: Genetic Associations in Acute Leukemia Patients after Matched Unrelated Donor Allogeneic Hematopoietic Stem Cell Transplantation

2015 | 2013

MS., Cancer Biology

State University of New York at Buffalo — Buffalo, NY

- Thesis: Reprogramming androgen receptor and lysine-specific demethylase 1 transcriptome in castration-resistant prostate cancer

2015 | 2013

MSc, Integrated Systems Biology

Universite du Luxembourg — Luxembourg, Luxembourg

- Interdiscplinary EU-US Atlantis Program

SELECTED POSITIONS

Present | 2018

Data Scientist

Covail — Columbus, OH

- Built custom solutions for Fortune 500 companies. Solutions had ROIs in hundreds of thousands of dollars.
- Built, developed, deployed models from data acquisition to production. Wrote an R package (usethis, devtools, testthat) for every single project I've worked on. Created plumber API webservices for many models.
- Projects included building custom machine learning models in areas of: predictive staffing in hospitals, anomaly detection in warehouse supply chain, continuous auditing of insurance agent commisions, detecting anomalies of substation communication for electric power grids, predicting code violations in government R&D laboratories, creating a matching algorithm for complex library cataloging system
- AWS, GCP, Docker, Natural Language Processing, Deep Learning (TensorFlow, PyTorch), Neural Networks

2019 | 2015

Graduate Research Associate

Sucheston-Campbell Lab, The Ohio State University — Columbus, OH

- PhD research project application was probing for genetic associations in leukemia patients (and their donors) after they received a bone marrow transplant.
- Built statistical models and software solutions on genome wide association study data. Genetic imputation (IMPUTE2, Sanger/Michigan servers). Association testing. Survival Analysis. ENCODE, 1000 Genomes, UKBiobank, GTEX, TCGA. PheWAS.
- Daily use of a compute cluster (SLURM), UNIX, shell, awk, bash, crontab
- Published 2 first author publications and 7 total publications from this project.

2015 | 2013

Graduate Research Assistant

Foster Lab, Roswell Park Cancer Institute — Buffalo, NY

- Masters research project was an interface between wet and dry lab.
- Project characterized transcriptomics (RNA sequencing) of castration resistant prostate cancer in vitro and using The Cancer Genome Atlas.

CONTACT

abbas@abbasrizvi.com
aarizvi
github.com/aarizvi
abbasrizvi.com
+1 716 725 5572

LANGUAGE SKILLS

- R
- RMarkdown
- R Shiny
- Python
- UNIX
- SQL
- Docker
- Git

OPEN SOURCE CONTRIBUTIONS

All projects available at `github.com/aarizvi/<name>`

`gwasurvivr`: R package to conduct genome wide survival analysis
`photon`: R package to build standalone R Shiny app using Electron

MORE INFO

See full CV at abbasrizvi.com for more complete list of positions and publications.

Made w/ pagedown.
Source code: github.com/aarizvi/cv.
Last updated on 2020-08-05.