Mahesh Vangala

A programming enthusiast with full stack expertise bringing ideas to life, using but not limited to, Angular/Python/Beam/Kafka/(Neo4j, Cassandra)/Docker/Kubernetes/(AWS, GCP).

With 10+ years of hands on experience in academic, research and clinical settings working with genomic and clinical data, I bring broad spectrum of skills ranging from Data Engineering, Data Science and Dev/Ops.

Creative and goal oriented, I take immense pride in end-to-end automation of operational tasks and a big believer of the quote "you don't know it until you teach it to a computer".

Looking forward to the opportunities to prove and enhance my leadership and technical expertise.

Experiences

2017 | present
Data Scientist
UMass Chan Medical School — Worcester, MA

2014 | 2017
Sr. Computational Biologist
Dana-Farber Cancer Institute — Boston, MA

2012 | 2014
Bioinformatics Research Associate
Vermont Genetics Network, University of Vermont — Burlington, VT

2010 | 2012
Bioinformatics Software Engineer
Institute for Genome Sciences, Univeristy of MD School of Medicine — Baltimore, MD

Selected Projects

2020 | 2022
National COVID Cohort Collaborative (N3C)
UMass Chan Medical School
- Led the project from plan to prototype to production in under 2 months.
- Designed and delivered end-to-end automation of weekly data transfers.
- Continuous integration of feature updates using Docker and AWS Fargate stack.
- Automated email notifications of data quality metrics.

2015 | 2017
Visualization Pipeline for RNA-seq data (VIPER)
Dana-Farber Cancer Institute
- A comprehensive solution that performs most standard RNA-seq analyses quickly and effectively.
- Published work in peer reviewed journal. https://doi.org/10.1186/s12859-018-2139-9
- Played a vital role in devising and developing module based design pattern.

2010 | 2012
CloVR: a virtual machine for automated and portable sequence analysis from the desktop using cloud computing
Univeristy of MD School of Medicine
- CloVR supports use of remote cloud computing resources to improve performance for large-scale sequence processing.
- Published work in peer reviewed journal. https://doi.org/10.1186/1471-2105-12-356
- My work into comparative genomics pipeline in CloVR resulted in further funding of the project.

Education

2008 | 2010
Professional Science Masters in Bioinformatics (Genomics track)
Virginia Commonwealth University — Richmond, VA

2005 | 2007
M.S in Biophysics
University of Madras — Chennai, India

2001 | 2004
B.S. in Biotechnology
Osmania University — Hyderabad, India

Contact Info

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Skills

Python
Java
Perl
Bash

Angular
GraphQL

Docker
Kubernetes

Snakemake
Apache Beam
Apache Spark

RabbitMQ
Redis
Apache Kafka

SQL Server/MySQL
Neo4J
Cassandra
Bigquery
Athena
DynamoDB

AWS
GCP