# 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 • Data Scientist

present

2014

2017

2014

2012

2020

2022

2015

2017

2010

2012

2008

2010

2005

2007

2001

2004

UMass Chan Medical School 

♥ Worcester, MA

Sr. Computational Biologist

Dana-Farber Cancer Institute 

Boston, MA

Bioinformatics Research Associate

Vermont Genetics Network, University of Vermont 

♥ Burlington, VT

**Bioinformatics Software Engineer** 

Institute for Genome Sciences, Univeristy of MD School of Medicine 

Baltimore, MD

### Selected Projects

National COVID Cohort Collaborative (N3C)

UMass Chan Medical School

- Led the project from plan to prototype to production in under 2 months.
- $\bullet$  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.

### 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.

# 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**

Professional Science Masters in Bioinformatics (Genomics track)

Virginia Commonwealth University 

♥ Richmond, VA

M.S in Biophysics

B.S. in Biotechnology

Osmania University Phyderabad, India

### Contact Info

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- github.com/vangalamaheshh
- **443)326-1957**

#### 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**