Professional STATEMENT

A tech enthusiast by passion and a scientist at heart, I bring creative approaches to solving wicked problems. Over the years, I have delivered projects and acquired expertise in building automated big-data workflows and machine-learning models. Now, with a unique blend of Data Science and Computational background - I want to leverage my experiences to tackle scientific & business challenges, provide insights, and deliver value.

EDUCATION

M.Sc. Computational Biology & Bioinformatics, track Machine Learning Feb'17 - Oct'20

B.Tech. Chemical Engineering

Universiteit Utrecht, the Netherlands

Jul'10 - Apr'14

Indian Institute of Technology Bombay, India

aggregate grade - 8.62/10

aggregate grade - 8.37/10

Professional

Bioinformatics research scientist, Erasmus Medical Center, Rotterdam

Feb'21 - date

EXPERIENCE

- o leading a large-scale global sewage project; focus on mining phage signals in complex metagenomics
- o developed workflows for automated assembly, analysis, and visualization of SARS-CoV-2 genomes
- o expertise in (meta)data management that comply with the FAIR principle

Mentor and Partnerships, volunteer at Techlabs Rotterdam

Jul'22 - date

- o journey lead and mentor for the Data science learning track
- o coordinated a Sentimental Analytic project that focused on benchmarking the sustainable practices in the Dutch logistics market; stakeholders expectations & project management

Junior Research Fellow, Chemical Engineering, IIT Bombay

May'14 - Feb'15

o developed a stochastic model (Gillespie algorithm implementation) for investigating the distribution of mutations in evolving microbial populations; neutral mutations dominate the rate of genome evolution

KEY PROJECTS & RESPONSIBILITIES

Startup success dashboard, project @Techlabs Rotterdam

Jan'22 - Jun'22

o built an interactive dashboard to help identify the key factors that drive the success of tech startups

Literature Review, Universität Bielefeld

May'20 - Sep'20

o authored Age is not just 'a' number: through the lens of systems physiology (thesis, top 10% grade)

Genotype-phenotype mapping via deep learning, CWI Amsterdam

Sep'18 - Apr'20

- o developed a novel deep convolutional neural network as a method for complex biomarker discovery; investigated potential interactions in microbial genomes (sample-code, report)
- o deployed model training and validations on GPUs on the cloud-based High-Performance Cluster
- benchmarked the performance metrics of the deep learning architecture

Graduate Teaching Assistant, Universiteit Utrecht

May'18 - Jul'18

teaching and supervision of undergraduate students for the course biomolecular chemistry

Phage-host prediction via machine learning, Theoretical Biology & Bioinformatics

- o led feature engineering of genomic phage-host adaptations & its multi-dimensional data integration
- o employed machine learning algorithms classification via Random Forests on large genomic datasets
- o achieved > 90% classification accuracy & discovered the salient features that maximize class separation

ACADEMIC ACHIEVEMENTS

NWO Scholarship for traineeship at CWI Amsterdam

Sep'18 - Apr'20

Scholarship for summer internship at TU Kaiserslautern

May'13 - Jul'13

Secured All India Rank 843 (top 0.3%) in IIT-JEE amongst 500,000+ students

2010

2016

Graduate Record Examination: Quantitative: 163/170, Verbal: 156/170, Total: 319/340

Programming

Languages: Python, Bash, SQL, R, Matlab, Scilab, C++, LATEX

SKILLS

Frameworks: snakemake, conda, TensorFlow, git, jupyter, scikit-learn, numpy, pandas Machine Learning: Random Forests, Elastic-Net, deep learning implementations on GPUs

EXTRACURRICULAR Life Science Representatives, Graduate School of Life Sciences UU

Sep'17 - Aug'18

Sports: power-lifting, squash, badminton, biking, trekking

Interests: meditation, tech start-ups, podcasts, health & fitness, (experimental) cooking, (electronic) music