Interests

Research: quantitative biology, machine learning, computational evolutionary genomics

Professional: data-driven intelligence, data-integration, reproducible workflows

EDUCATION

M.Sc Molecular and Cellular Life Sciences

2020

Universiteit Utrecht, the Netherlands cumulative grade - 7.66/10

B.Tech Chemical Engineering

Co-founder: Kairos Food Labs

2014

Indian Institute of Technology Bombay, India

cumulative grade - 7.02/10

Professional

Teaching assistant, Chemistry, Universiteit Utrecht

May'18 - Jun'18

EXPERIENCE o worked with dr Eric G. Huizinga for supervising 20 students during the practical biomolecular chemistry

Mar'15 - Mar'16

o performed targeted surveys to identify key consumer needs and key product attributes

Junior research fellow, Chemical Engineering, IIT Bombay

o worked with dr Supreet Saini to develop a stochastic in-silico model for investigating the distribution of mutations in evolving microbial populations; neutral mutations dominate the rate of genome evolution

KEY ACADEMIC

Projects

Literature review, Universität Bielefeld

Apr'20 - Aug'20

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

o conceptualized and launched a ready-to-cook food company to create a consumer brand of snacks

Genotype-phenotype mapping, CWI Amsterdam

Oct'18 - Feb'20

o worked with dr Marleen Balvert & prof dr Alexander Schönhuth for developing a deep neural network that helps investigate potential epistasis effects across microbial pangenomes (sample-code, report)

Phage-host interaction prediction, Theoretical Biology and Bioinformatics

Jul'17 - Sep'18

o worked with dr John van Dam and dr Bas E. Dutilh for identification & integration of genomic phage-host adaptations and implemented machine learning algorithms on large-scale datasets

Research fellowship, TU Kaiserslautern, Germany

May'13 - Jul'13

o worked with dr Benjamin Selmke and prof dr Wolfgang E. Trommer for understanding the protein folding mechanisms & intermittent states of maltose-binding protein, via electron paramagnetic resonance

Student internship, Helmholtz Centre for Environmental Research Leipzig, Germany

Jun'12 - Jul'12

- o worked with dr Lorenz Adrian on a project aimed at bio-remediation of soils contaminated with effluents
- o tested environmental conditions for anaerobic microbes that mitigates halogenated contaminants

ACADEMIC ACHIEVEMENTS

NWO scholarship for traineeship CWI Amsterdam

Nov'18 - Nov'19

Scholarship for summer internship TU Kaiserslautern

May'13 - Jul'13

Secured All India Rank 843 (top 0.3%) in IIT-JEE amongst 500,000+ students Graduate Record Examination: Quantitative: 163/170, Verbal: 156/170, Total: 319/340

2010

School merit list: national 10th grade examination with 94% aggregate marks

2016

2010

Programming

Programming languages: Python, C++

SKILLS

Scripting languages: Bash, R, Scilab, Matlab, LATEX Workflows: TensorFlow, conda, git, Jupyter, Snakemake

Positions of

Life Science Representatives, GSLS, UU

Sep'16 - Feb'17

RESPONSIBILITY

Film and Media Secretary, Hostel 2, IIT-Bombay Sergeant, National Cadet Corps, 4-MP Battalion

May'11 - Apr'12 Apr'06 - Mar'07

EXTRACURRICULAR Clubs: involved with Pixels - the photography club of IIT Bombay ('11-'14)

Interests: meditation, podcasts, scientific communication, nutrition and ketogenesis

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

Hobbies: photography, experimental cooking, travelling, electronic music

Links: in divyaePrasad

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