

PROFESSIONAL STATEMENT	<i>A tech enthusiast by passion and scientist at heart, I bring creative approaches to solving wicked problems. Over the years I have delivered projects and developed my skills in building bioinformatics workflows and machine learning models. Now, with a unique blend of Biology, Engineering, and Computational background - I want to leverage these increasing experiences to tackle multidisciplinary challenges and provide insights.</i>	
EDUCATION	M.Sc. Molecular and Cellular Life Sciences, track Computational Biology 2020 Universiteit Utrecht, the Netherlands cumulative grade - 7.66/10 B.Tech. Chemical Engineering 2014 Indian Institute of Technology Bombay, India cumulative grade - 7.02/10	
PROFESSIONAL EXPERIENCE	Genotype-phenotype mapping via deep learning , CWI Amsterdam Oct'18 - Feb'20 <ul style="list-style-type: none"> developed a novel deep convolutional neural network to investigate potential epistasis effects across microbial pangenomes (sample-code, report); method is suitable for complex biomarker discovery deployed model training and validations on GPUs on the High Performance Cluster on cloud servers benchmarked the deep learning architecture; performance comparable to an Elastic-Net regression Teaching assistant , Chemistry, Universiteit Utrecht May'18 - Jun'18 <ul style="list-style-type: none"> responsible for the supervision and mentoring of 20 students for the course biomolecular chemistry Phage-host prediction via machine learning , Theoretical Biology and Bioinformatics Jul'17 - Sep'18 <ul style="list-style-type: none"> feature engineering of genomic phage-host adaptations and multi-dimensional data integration implemented machine learning algorithms (Random Forests) on large-scale datasets - binary classification achieved > 90% classification accuracy and identified salient features that maximize class discrimination Junior research fellow , Chemical Engineering, IIT Bombay May'14 - Jan'15 <ul style="list-style-type: none"> developed a stochastic model (employing Gillespie algorithm) 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 <ul style="list-style-type: none"> authored Age is not just 'a' number: <i>through the lens of systems physiology</i> (thesis, top 10% grade) Research fellowship , TU Kaiserslautern, Germany May'13 - Jul'13 <ul style="list-style-type: none"> designed and performed experiments for understanding the protein folding mechanisms & the intermittent states of maltose-binding protein, via electron paramagnetic resonance 	
ACADEMIC ACHIEVEMENTS	NWO Scholarship for traineeship at CWI Amsterdam Nov'18 - Nov'19 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 Graduate Record Examination : Quantitative: 163/170 , Verbal: 156/170 , Total: 319/340 2016 School merit list : national 10th grade examination with 94% aggregate marks 2010	
PROGRAMMING SKILLS	Languages: Python, C++, Bash, R, Scilab, Matlab, L ^A T _E X Workflows: TensorFlow, conda, git, Jupyter, scikit-learn, Numpy Machine Learning: deep neural networks including GPU implementations, Random Forests, Elastic-Net	
POSITIONS OF RESPONSIBILITY	Life Science Representatives , GSLs, UU Sep'16 - Feb'17 Film and Media Secretary , Hostel 2, IIT-Bombay May'11 - Apr'12 Sergeant , National Cadet Corps, 4-MP Battalion 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 @divyaePrasad divPrasad	