CURRICULUM VITAE

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OBJECTIVE

To achieve maximum knowledge in a new exciting field of computational biology as it a need of hour to develop high performance algorithm and tools for better understanding of complex biological systems.

EXPERIENCE

Cellworks Research India Pvt. Ltd.

- Worked as an Associate Bio- modelling Scientist (2nd February 2015-2nd September 2016).
  My work profile as Associate Bio modelling Scientist involved following roles:
  Literature analysis, Data mining and data interpretation, Use of various databases such as NCBI , KEGG, HPRD, STRING etc to extract all relevant information about genes involved in cancer. Mathematical modelling of genes based on the literature survey using graphical user interface and enzyme kinetics equation for designing therapies for cancer. Simulation of Insilco model for understanding effect of particular gene on biomarkers and validation of signalling model through designing studies and testing on the model. Testing and aligning of approved drugs on the built model. Documentation of information related to assigned gene

Alchem International Faridabad, India

- Received training on process of fermentation and parts of fermentor and how it is optimized.

Panacea Biotec New Delhi, India

- Successfully completed training on INDUSTRIAL PRODUCTION OF VACCINE: OPV Oral polio vaccine production involves various steps such as Solution preparation, Sterilization, Blending, Filling, Visual, Inspection, Labeling and Packaging.

QUALIFICATIONS

Qualification	Name of Examination	Year	Board/ University	Institution
PhD	PhD (Computational Biology)	July 2017-Present	IIIT Delhi	IIIT Delhi
Masters	MSc (Oncology)	Sep 2013 – Sep 2014	University of Nottingham	University of Nottingham
Graduation	B Tech, (Bio-Technology)	Aug 2008-June 2012	Kurukshetra University, Haryana	University Institute of Engineering & Technology
12th	CBSE	2008	DAV Public School,Sector-14,Faridabad	DAV Public School,Sector-14,Faridabad
10th	CBSE	2006	DAV Public School,Sector-14,Faridabad	DAV Public School,Sector-14,Faridabad

PROJECT WORK (PhD)

Ongoing research project involves Analysis of single cell expression data for pseudo temporal ordering. It includes visualization, clustering and trajectory inference of single cell data in pathway space.

PROJECT WORK (Masters)

Analysis of regulation of stem cell populations through investigating the effects of Stat3 pathway

PROJECT WORK (B.Tech)

Studies on sequence alignment and promoter identification of abiotic stress genes in *Arabidopsis thaliana*.

Different steps were performed for the detection of sequence homology in abiotic stress responsive genes in *Arabidopsis thaliana* which are as follows

1. Gene identification
2. Promoter Prediction
3. Sequence Alignment
4. Tree Generation

Bioinformatics software and tools were used in order to accomplish this project.

Optimization of artificial seed synthesis in *Bacopa monnieri* (Brahmi)

This project was carried out to

1. To standardize the protocol for production of synthetic seeds in Brahmi
2. To evaluate the synthetic seeds for germination/sprouting

TECHNICAL SKILLS

- Proficient in R
- Python- Familiar with process and Python software development.
- Certification in SAS
- SQL- Proven ability to handle complex issues. Exceptional analytical and quantitative skills
- Statistics: Estimation, Hypothesis testing, Comparisons of several means, Regression and Correlation, Non-Parametric statistics, Probability distributions.
- Statistical Software: SPSS
- Bioinformatics: Knowledge about Databases, The Entrez System, Sequence Alignment and Database searches, Phylogenetic Analysis and Sequence Analysis using Software resources
- Proficient in PCR, RNA extraction, cDNA synthesis and Agarose gel electrophoresis
- Good command over MS Office and C language

ACHIEVEMENTS/AWARDS

- Received Developing Solutions Scholarship from University of Nottingham for the Masters Program
- Received certificate of merit from CBSE for outstanding academic performance and for being among the top 0.1 percent of successful candidates.
- Involved in social services with Help Age India.
- Have been an excellent student in academics throughout school life
- Good in art & craft, won prizes in on the spot painting competitions

PUBLICATIONS

- Accepted Book chapter: Pathway Informatics**,** Encyclopedia of Bioinformatics and Computational Biology, Elsevier