

Sonali Joshi

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Education

MS in Biology | August 2007 | Florida State University, Tallahassee, FL
Computational Biology, Population Genetics, Bioinformatics

MS Thesis: "Estimation of Selection Coefficient Using Approximate Bayesian Computation"

Advisor: Peter Beerli

Bachelor of Engineering | August 1998 | Pune University, Pune, India
Electronics and Telecommunication Engineering

Professional Certification

Genomic Data Science | Coursera Specialization, Johns Hopkins University | 2017-2018

This eight-course specialization covered Introduction to Genomic Technologies, Galaxy, Python, PANDAS, Algorithms for DNA Sequencing, Unix - Command Line Tools, R - Bioconductor, Statistics, and a Capstone project.

Professional Experience

Staff Research Associate | UCLA- School of Nursing | 2020-2021

Post GWAS data analysis-

- Converted GWAS summary data for pathway analysis using tools (text manipulation, BEDtools) on the Galaxy server.
- Created customized tools for processing large files with Python (PANDAS).
- Pathway and Key Driver Analysis using Mergeomics.
- Visualization of network graphs with Cytoscape.

Senior Executive | 3i Ltd. Mumbai India | 2001 – 2003

Developed and maintained www.icicidirect.com, an online trading and investment website. Worked on the middleware platform TUXEDO and UNIX, C, Oracle.

Junior officer | Godrej Consumer Products, Mumbai India | 1999 – 2001

Implemented and customized the ERP system (MFG/PRO) for the consumer products division. Trained users of the system.

Contribution to papers

SY Jung, JC Papp, M Pellegrini, H Yu, EM Sobel (2021). [Molecular Biology Networks and Key Gene Regulators for Inflammatory Biomarkers Shared by Breast Cancer Development: Multi-Omics Systems Analysis](#). *Biomolecules* 11 (9), 1379.

SY Jung (2021). [Multi-Omics Data Analysis Uncovers Molecular Networks and Gene Regulators for Metabolic Biomarkers](#). *Biomolecules* 11 (3), 406.

Volunteer Experience

Girl Scouts | Troop Leader | 2016 - present

Mentor girls, plan and lead bi-monthly meetings, manage troop funds and financial records, coordinate troop activities, and manage product sales.

Clover Ave Elementary Booster Club | 2013 – 2019

Organized fundraising events. Coordinated 300+ parent volunteers for events that raised up to \$30,000 for the school.

References

Dr. Su Yon Jung, Assistant Professor in the UCLA School of Nursing - sjung@sonnet.ucla.edu

Dr. Peter Beerli, Professor, Dept. of Scientific Computing, Florida State University - beerli@fsu.edu