vinay**nair**

computational biologist

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areas of interest

Life Sciences
Data Sciences

areas of expertise

Computational Biology
Biophysics
Molecular Dynamics Simulations
Supervised machine learning techniques
High-Performance Computing

awards

CSIR-UGC NET research fellowship
Selected for multiple workshops
Presented posters at multiple conferences
Received multiple travel awards

education

2016 – Current **PhD** in Biochemistry & Cell Biology
MD Anderson UTHealth Graduate School, Houston, USA
Modeling transmembrane potential in the context of cancer using high-performance computing.

2007-2012 5 years integrated **Master of Science** in Biotechnology
Institute of Bioinformatics & Biotechnology, Pune, India
Studying the positioning of chromosomes in interphase and mitosis using coarse-grained modeling.

experience

2012 – 2014 **Research Fellow**
Center for Development of Advanced Computing, Pune, India
Development of data-driven predictive frameworks to solve various biological problems.

2014-2016 **Project Engineer**
Center for Development of Advanced Computing, Pune, India
Industrial collaboration with Lupin Limited for developing atomistic model of protein target used for drug screening.
Development of predictive model for classification of protein structures as native and non-native.

publications

2017 Malviya, S., Ramakrishnan, E.P., Jani, V., Uppuladinne, M.V.N., **Nair, V.**, Sonavane, U. & Joshi, R. *Hydrogen Bond Analysis Tool for Molecular Simulation Trajectories using MapReduce* Manuscript Submitted to Biodata Mining

2014 Gurav, A., **Nair, V.**, Gupta, U., & Valadi, J. (2014). *Glowworm Swarm Based Informative Attribute Selection Using Support Vector Machines for Simultaneous Feature Selection and Classification.* In Swarm, Evolutionary, and Memetic Computing (pp. 27-37). Springer International Publishing.

2013 **Nair, V.**, Dutta, M., Manian, S. S., Kumari, R., & Jayaraman, V.K. (2013). *Identification of Penicillin-binding proteins employing support vector machines and random forest.* Bioinformation, 9(9), 481.

2013 **Nair, V.**, Sambre, D., Joshi, S., Bankar, A., Ravi Kumar, A., & Zinjarde, S. (2013). *Yeast-derived melanin mediated synthesis of gold nanoparticles.* Journal of Bionanoscience,7(2), 159-168.