

Dr. Shivandappa

Department of Biotechnology

Dr. Shivandappa, Assistant Professor			
Educational Qualification	M.Sc., (MCA), PhD.		
Experience	Teaching	17 Years	
	Industry	03 Years	
Area of Interest	Bioinformatics and Biotechnology		
Date of Joining RVCE	28-06-2007		
Email ID	shivandappa@rvce.edu.in		

No of Projects Guided

UG projects guided : B.E. 28

PG projects guided : M.Tech. 34

No of Publications:

National Conference : 01

International Journal Publications: 17

International Conferences : 07

National Conference:

1. Pushpa Agrawal, Shivandappa, Ajeet Kumar Srivastava, Manjunath ***“Application of BioPerl and Perl in sequence analysis”*** National conference on **Computational Biology** at RVCE on 16.11.2007.

International Journals:

1. MAHADEVI NARASANAGI, LINGAYYA HIREMATH, NARENDRA KUMAR, SANGAPPA **SHIVANADAPPA**. Metabolite Profiling of Scenedesmus dimorphus Grown on Dairy Wastewater and their Antioxidant and Anti-Diabetic Activity. African Journal of Biological Sciences. ISSN : 2663-2187. 2024
2. Anesh SA, Shriya Vikram, Sloka Kumarswamy, **Shivandappa**. **Advances in Multi-Omics Integration: Unveiling the Mechanisms of Metabolic Pathways, Proteomics, Genomics through**

Computational Tools. INTERNATIONAL JOURNAL OF NOVEL RESEARCH AND DEVELOPMENT. Volume 9 Issue 9, September-2024.

3. Amruth N Murthy, Kavana N Murthy, **Shivandappa**, Dr. Narendra Kumar S. **Butterfly Image Classification Using Convolutional Neural Network[CNN]**. International Journal of Innovative Science and Research Technology. Volume 9, Issue 8, 2024.
4. Archith Shankar, Arushi R Kadam, Nishita Senthilkumar, Shradha A Venkatachalam, **Shivandappa**, Narendra Kumar **AGRICULTURAL DATA ANALYSIS USING MACHINE LEARNING: A STUDY ON DRY BEAN CLASSIFICATION**. International Journal of Innovative Science and Research Technology. Volume 9, Issue 9, 2024.
5. **Shivandappa**, Narendra Kumar S, Praveen Kuamr, Harshith M L, Channarushabendra Y. **RICE LEAF DISEASE IMAGE CLASSIFICATION USING CONVOLUTIONAL NEURAL NETWORK[CNN]**. **Journal of Emerging Technologies and Innovative Research**, Volume 11, Issue 9, 2024.
6. Nagashree B., Rishika Mohan V., Shreya Lal, Shweta Bathija, **Shivandappa** and Ajeet Kumar S. **ENHANCED CLASSIFICATION OF COFFEE BEAN SPECIES THROUGH COMPUTATIONAL MODELING AND IMAGE ANALYSIS**. *International Journal of Advanced Research*, Vol 12, Issue Aug, 2024.
7. **Shivandappa**, MOHAMMAD BILAL M, SANJU H K, VIGNESH KUMAR KAIPA, Narendra Kumar S. **Automated Mango Classification Using Convolutional Neural Networks (CNN)**. International Journal of Innovative Science and Research Technology. 2024.
8. Lipika S, Ravi Shankar S, **Shivandappa**. Breast Cancer Prediction using Decision Tree. INTERNATIONAL JOURNAL OF NOVEL RESEARCH AND DEVELOPMENT. Page 761 – 768. 2024.
9. Vidya Niranjana, **Shivandappa**, Nagashree N Rao, Riddhi Dhaga, Siddhi Dhaga, Tanisha Shetty. Beyond Bacteria: Unveiling the Human Gut Virome with OmixBox. Tanz Research Journal. Vol 10, Issue 4, 2023-2024.
10. Rajeswari. M, Pushpa Agrawal, Nagashree N Rao, Ashwani Sharma, Lingayya Hiremath, Tippareddy K S, **Shivandappa**, Modelling and efficiency assessment of the up flow fixed bed process packed with Moringa oleifera for continuous Cd(II) removal from drinking water, Journal of Molecular Structure, Volume 1236, 2021, 130328, ISSN 0022-2860, <https://doi.org/10.1016/j.molstruc.2021.130328>.
11. Shreya SK *, Pushpa Agrawal and **Shivandappa**, Stem cell therapy for degenerative disc disease: A review, International journal “**GSC Biological and Pharmaceutical Sciences**”, 2021, 15(03), 238–248.
12. **Shivandappa***, Pushpa Agrwal, V. Krishna. **Production of Biodiesel from Lipase Mediated Trans-Esterification by Reducing Free Fatty Acid Content of Algal Oil Produced from Botryococcus braunii**. Poll Res. 36 (2): 375-381 (2017).
13. **Shivandappa***, Pushpa Agrwal, V. Krishna, **IMPACT OF FREE FATTY ACID CONTENT IN VEGETABLE OIL ON YIELD OF BIODIESEL**, Journal of Environmental Research And Development, Vol.11 No. 04, April-June 2017.
14. **Shivandappa***, Agrawal P.1, Krishna V.2, **Standardization of Media Composition and Culture Conditions for the Growth of Botryococcus braunii**, *Journal of Environmental Research And Development*, Vol.10 No. 04, April-June 2016.
15. **Shivandappa***, Praveen Kumar Hadapad, **“Protein Loop Modeling” at International Conference on Engineering and Applied Science (ICEAS)** held at Bengaluru on 13th July, 2014 and Paper has been published in **International Journal on Computer Theory and Engineering (IJACTE)**, ISSN (print) – 2319 -2526.

IEEE Conference Publication/International Conference:

1. Hima Bindu Attel, Rakshaa P, Arya K, Brunda S, **Shivandappa**, Sumathra Manokaran. **Targeting Friedreich Ataxia: A sustainable path to safer and smarter therapeutics through integrated Docking and Toxicology**. 8th IEEE International Conference on Computational Systems and Information Technology for Sustainable Solutions on November 9, 2024.
2. **Shivandappa**, Madhumitha Dhanasekaran, Jyothika Reddy, Medha R Rao, N S Manasi, Sumathra Manokaran. **Targeted Drug Repurposing for Idiopathic Pulmonary Fibrosis**. 8th IEEE International Conference on Computational Systems and Information Technology for Sustainable Solutions on November 9, 2024
3. **Shivandappa**, Tanush Nilesh Gundawar, Spoorti Anil Bandikatte, Shradha Anand Mulimani, Rao Deeksha Umesh, **Divyashree Kori**. **Image-Based WBC Analysis: A Machine Learning Approach for Cancer Detection**. 8th IEEE International Conference on Computational Systems and Information Technology for Sustainable Solutions on November 9, 2024
4. **Shivandappa**, Harsha Gurulingappa, Usha Biradar, “**Machine Learning for Chemical Named Entity Recognition in Scientific Literature**” held at International Conference on Advances in Engineering and Technology -2014 (IEEE – ICAET – 2014) held on 2nd & 3rd May, 2014, organized by EGS Pillay Engineering College, Nagapattinam – 611002.
5. **Shivandappa**, Chaitra V, “**Development of fast and accurate technique for Virtual Docking**” at International Conference on Information Technology & Communication Engineering (ICITCE) held at Bengaluru on 5th July 2014.
6. **Shivandappa**, Manasa DA, A review paper based on Dermatoglyphics titled “*The Role of Dermatoglyphics in Screening of Genetic Disorders*” was presented at the conference on “*Advances in Research and Development and Dissemination of Interdisciplinary Developments for Sustainability*”, held on 25th and 27th April, 2015 at R.V College of Engineering, Bengaluru.
7. Pushpa Agrawal, **Shivandappa**, Ajeet kumar Srivastava, Manjunath “ Application of BioPerl and Perl in sequence analysis” National conference on Computational Biology at RVCE on 16.11.2007.

Proficiency courses/Seminars/Conferences/Workshops coordinated and conducted:

1. The project titled “**Production of clean Biofuel from Micro algae**”, got the award of “*Project of the year 2016*” by Karnataka State Council for Scientific Research, Govt. of Karnataka
2. Coordinated two weeks proficiency course on “**Biomolecular Simulation**” jointly organised at Department of Biotechnology, RVCE and EDUCEPT New delhi from 13th june 2016 to 25th june 2016.
3. Delivered **Key Note address** at Department of Biotechnology and Microbiology, Bangalore University and gave talk on “**Development of Soft Skills in Biotechnology and Microbiology through Bioinformatics approach**” on 24th Feb 2015.
4. Coordinated two day workshop on “**Next Generation Sequencing Analysis**” at R V College of Engineering, Bangalore from 18th – 19th 2014.
5. Delivered lecture on “**Tools and Techniques in Bioinformatics and Chemoinformatics**”, one day workshop organized by Department of Biotechnology, Madanapalle Institute of Technology and Science, Anantapur, AP, 15 October 2011.
6. Coordinated and conducted two day Proficiency course on “**An insilico approach for Drug Design**” at R V College of Engineering.
7. .One day National conference on “**Computational Biology**” at RVCE on 16.11.2007.

Workshops/Training programs attended:

1. Faculty Development programme on “Software Engineering Principles” conducted by Cognizant technologies at RVCE, Bengaluru on 30.06.2007.
2. Entrepreneurship Development Programme for faculties conducted by ASCENT at Bengaluru from 07.09.2007 to 08.09.2007.
3. Two day training program “Personality Enhancement Programme” organised by Dept. of Placement & Training at RVCE from 14.12.2007 – 15.12.2007
4. Training programme on “Bioinformatics” held at Monsanto Research Centre Bangalore, from 10th June – 10th August - 2008.
5. One day symposium on “Insilico Drug Design and Clinical Research” organised by Dept. of Biotechnology, BMS College of Engineering, Bengaluru held on 7th November, 2008.
6. Three days training program on “Data warehousing and Data Mining” held at Accenture, Bangalore from March 17 to 19, 2009.
7. Attended 21 days training program on “Techniques in Molecular Biology” held at GKV from 4th Sept to 25th Sept 2009.
8. Three day International Symposium on “Interface between Chemistry and Biology” jointly organised by Indian Institute of Science & National Centre for Biological Sciences held at IISc. and NCBS, Bengaluru from 17-02-2009 to 19-02-2009.
9. Two day “Faculty Development Programme – Workshop on Data Warehousing” organized by Accenture Services Pvt. Ltd (Bang 3) held at Accenture premises in Bengaluru from 16-03-2009 to 17-03-2009.
10. Trainers Training Program on “Business Opportunities & First Generation Entrepreneurs” conducted by Entrepreneurship Development Cell – VTU held at P.E.S. Institute of Technology, Bengaluru from 20-07-2009 to 25-07-2009.
11. Two day workshop on “Arts and Science of Counseling” organised by the Dept. of Placement and Training held at RVCE, Bengaluru from 10-08-2009 to 11-08-2009.
12. Three week DBT Sponsored training program on “Techniques in Molecular Biology” organised by GKV at GKV Bengaluru from 24-08-2009 to 15-09-2009.
13. Training on “STATISTICA DATAMINOR TOOL conducted by “STATSOFT” on DATAWAREHOUSING DATAMINING TECHNIQUES” held at RVCE, Bengaluru from 05-02-2010 to 06-02-2010
14. One day workshop on "e-waste recycle and waste management" held on 20th March 2010, at RVCE.
15. National Symposium on “E-Waste Management and Recycling” jointly organised by Dept. of MCA, Biotechnology and Karnataka State Pollution Control Board (Govt. Of Karnataka) held at RVCE, Bengaluru on 20-05-2010.
16. Two day workshop on “SCILAB” organized by department of Instrumentation Technology at R V College of Engineering
17. Two day training on “Instructional Excellence in Intelligent Systems” under the “Intel College Excellence Program” conducted in R V College of Engineering, Bangalore from 8th November to 9th November 2012.
18. Faculty development workshop on “High Performance Computing, Cloud Computing and Virtualization”, jointly organized by ISE/CSE/TEC/ECE/EEE/IT at R V College of Engineering, Bangalore from 21st to 23rd March 2013.
19. Five-Day Faculty Development Workshop on “Advanced Android Programming” jointly organized by ISE/CSE/MCA/TEC/ECE/EEE at R V College of Engineering, Bangalore from 6th – 10th January 2014.
20. Attended 2 Weeks Instructor Led Live Faculty Development Program On Internet of Things (IOT) Using Amazon AWS th th held during 14 - 25 June 2021 Organized by Finland Labs.

21. Attended 2 Weeks Instructor Led Live Online Faculty Development Program On Data Science Using Python th th held during 19 - 30 July 2021 Organized by Finland Labs (A Unit of Revert Technology Pvt. Ltd.)
22. Attended one week workshop on "Fundamentals of Quantum Computing and Applications" held during 1st-5th March, 2021, organized by Centre for Interdisciplinary Research in Quantum Information and Technology (CIRQuIT), in association with IEEE Computer Society, RVCE student chapter, and technically supported by IBM India Private Ltd.

Interaction with outside world:

1. Co-guided a project titled ***"Insecticidal toxins: Data mining, analysis and visualization using R language"*** with Dr. Ravindra Pushkar, Senior Scientist & Project Manager, **Monsanto Research Centre**, Bengaluru, 2017.
2. Co-guided a project titled ***"QTLMiner: An R Shiny based Tool to Mine Publically available QTLs"*** with Mr. Karnam Vasudeva Rao, Senior Scientist & Project Manager, **Monsanto Research Centre**, Bengaluru, 2017.
3. Delivered **Key Note address** at Department of Biotechnology and Microbiology, Bangalore University and gave talk on ***"Development of Soft Skills in Biotechnology and Microbiology through Bioinformatics approach"*** on **24th Feb 2015**.
4. Co-guided a project with Mr. Harsha Gurulingappa, **Molecular connections**, Bengaluru titled ***"Machine Learning for Chemical Named Entity Recognition in Scientific Literature"*** **2014**.
5. Co-guided a project titled ***"Modeling of Ligand Binding Pocket"*** with Dr. Nagasuma Chandra, Prof. Dept. Of Biochemistry **IISc Bengaluru**, 2014.
6. Co-guided a project titled ***"Genetic Interaction Networks"*** with Mr. Ravindra Pushkar, Scientist & Project Manager, **Monsanto Research Centre**, 2014.
7. Delivered lecture on **AICTE** sponsored one day workshop titled ***"Tools and Techniques in Bioinformatics and Chemoinformatics"***, organized by Department of Biotechnology, **Madanapalle Institute of Technology and Science, Anantapur, Andhra Pradesh** on 15 October 2011.

Funded Projects:

1. DBT: Funded project entitled ***"Functional characterization of the regulatory genes involved in pungency in Capsicum sp. "*** under DBT's Twinning Programme for NER. 11.64 L
2. Received funds for project the titled ***"Regeneration, Elicitation Of Bioactive Compound Extracted From Endangered Medicinal Plant Mucuna pruriens And Study Of Its Inhibition Activity Using Bimolecular Simulation Studies"*** (Ref. No. 40S_BE_2138, amount Rs0.075 Lakhs) - 2017.
3. Received funds from TEQIP for the COE project titled ***"Enrichment of Arthrospira Platensis Biomass with Rodhovilum sulfidophilum to Produce neutraceuticals"*** (Amount 0.41 Lakhs), 2017.
4. Funds received from Karnataka State Council for Science and Technology (KSCST) for the project titled ***"Production of clean biofuel from Algae"*** (ref. No: 39S_B_BE_006, amount Rs. 0.115 Lakhs) - 2016.

Awards:

1. Awarded ***"Best Engineering Project of Year 2017"*** from Karnataka State Council Science and Technology (KSCST) on project entitled ***"Regeneration, Elicitation of Bioactive Compound Extracted from Endangered Medicinal Plant Mucuna pruriens and Study of Its Inhibition Activity using Bio molecular Simulation Studies"***.
2. **RSST** has honored in Recognition with pride for the achievements in the last year (2017) on 26th January 2018.

3. The project titled “**Production of clean Biofuel from Micro algae**”, got the award of “***Project of the year 2016***” by Karnataka State Council for Scientific Research, Govt. of Karnataka.
4. **RSST** has honored in Recognition with pride for the achievements in the last year (2016) on 26th January 2017.

Areas of Research and Interests:

1. Machine Learning
2. Algorithm Design and Analysis
3. Computational Genomics and Proteomics
4. DNA Computing