

# National Institute of Technology, Tiruchirappalli: Performa for CV of Faculty/ Staff Members

## Curriculum Vitae



**Brief Profile:** Dr. Balaji Banothu is an Assistant Professor presently working in the Department of Computer Applications, National Institute of Technology Tiruchirappalli (NITT), India. He received his Ph.D. Degree from the Department of Mathematical and Computational Sciences, National Institute of Technology Karnataka (NITK), Surathkal, India in the year 2018, and his M.Tech. Degree from the IIT Kharagpur, India in the year 2010. His research interests include Image Processing, Image Restoration, Deep Learning, and Machine Learning. He has published articles in reputed international journals and in reputed international conferences.

1. Name: **Dr.Balaji Banothu**
2. Designation: **Assistant Professor**
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Extn (Optional):  
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5. Email (Primary):balaji@nitt.edu                      Email (Secondary):balajiwgl@gmail.com
6. Field(s) of Specialization: Image Processing,  
Image Restoration, Deep Learning, Machine  
Learning.
7. Employment Profile

Job Title	Employer	From	To
Assistant Professor	NIT Trichy, India	11.05.2020	Till Date
Assistant Professor	IIIT Naya Raipur, India	13.01.2020	30.03.2020
Assistant Professor	VFSTR Deemed to be University, AP, India	04.06.2018	09.01.2020
Assistant Professor	VFSTR Deemed to be University, AP, India	15.06.2010	26.12.2014

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### 8. Academic Qualifications (From Highest Degree to High School):

Examination	Board / University	Year	Division/ Grade	Subjects
Ph.D.	NITK, Surathkal	2018		Image Restoration
M.Tech.	IIT Kharagpur	2010	First	Computer Science and Data Processing
M.Sc	Kakatiya University, Warangal	2008	First	Mathematics
B.Sc	Kakatiya University, Warangal	2005	First	Computer Science
Intermediate	Board of Intermediate, Andhra Pradesh	2002	First	Mathematics, Physics, Chemistry

### 9. Academic/Administrative Responsibilities within the University

Position	Faculty/Department/Centre/Institution	From	To
Member	Ph.D. Admission Committee Dec-2021, NIT Trichy	10.11.2020	30.4.2021
Member	NIMSET 2020 Counselling Committee, NIT Trichy	10.07.2020	11.12.2020
Co-Ordinator	M.Tech. (Data Analytics) Syllabus, NIT Trichy	10.08.2021	Till Date
Member	Anti-Raging Committee Member, NIT Trichy	Dec-2020	Till Date
Member	16 <sup>th</sup> Convocation Certificate Verification Committee Member, NIT Trichy	August 2020	Oct 2020
PAC Person	Chair M.Sc(CS), NIT Trichy	July 2021	Dec2021
PAC Person	Chair M.Tech(DA), NIT Trichy	Jan-2021	May-2021
PAC Person	Chair M.Sc(CS), NIT Trichy	Jan 2022	May 2022
Placement Coordinator	VFSTR Deemed to be University, AP	Jan 2010	Dec 2014
Internship Coordinator	VFSTR Deemed to be University, AP	Aug 2018	Jan 2020

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### 10. Academic/Administrative Responsibilities outside the University

Position	Institution	From	To
BOS Member	Lendi Institute Of Engineering And Technology, AP	July-2020	Till Date
Member, Doctoral Committee	VIT, Vellore	2021	Till Date
Member, Doctoral Committee	SRM, AP	2022	Till Date

### 11. Awards, Associateships etc.

Year of Award	Name of the Award	Awarding Organization

### 12. Fellowships

Year of Award	Name of the Fellowship	Awarding Organization	From (Month/Year)	To (Month/Year)
2015	Ph.D. Fellowship	Ministry of Human Resource & Development, Govt. of India	02.01.2015	10.04.2018
2008	M.Tech. Fellowship	Ministry of Human Resource & Development, Govt. of India	July 2008	June 2010

### 13. Details of Academic Work

#### (i) Curriculum Development

- Assisted to develop Curriculum for B.Tech(CSE,IT),M.Tech(CSE, DA), M.C.A and M.Sc(CS).
- Revised syllabus for subjects such as Image Processing, Formal Language Automata Theory, Compiler Design, Image and Video Analytics, Operating System, Data Structures, C-Language, Pattern Recognition, etc.

#### (ii) Courses taught at Postgraduate and Undergraduate levels

- **Theory Courses:** Web Technology and its Applications, Web Computing, Data Structures, Formal Language and Automata Theory, Compiler Design, Design and Analysis of Algorithms, Operating System, Object Oriented Programming Through Java (OOPs Through Java), C-Language, Design and Analysis of Algorithms.
- **Lab Handled:** Web Technology and Its Application Lab, C-Language, OOPs Through Java,

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(iii) Projects guided at Postgraduate level

Sr.No	Project Title	Student Name	M.C.A/M.Sc/M.tech.	Year
1.	Samsung bill- payment System	Majjari Vijaya Raghva(205220011)	M.Tech.(DA)	June-2022
2.	Tracking Data Across Distributed System Components	Vipul Vasistya(205220026)	M.Tech.(DA)	June-2022
3.	Connect Broadband Access Controller Distributed	Abhishek Kumar Pandey (205119003)	M.C.A	May-2022
4.	Plant Leaf Disease Detection and Classification Based on Transfer Learning Approach	Anindita Samanta (205320004)	M.Sc(CS)	May-2022
5.	Multi Attribute Dynamic Security Search	Shalu Patwari (205320020)	M.Sc(CS)	May-2022
6.	Face Mask Detection Using Deep Learning Technique	Kundan (205118031)	M.C.A	June-2021
7.	HotFix Log Tool	Lal Chand (205118034)	M.C.A	June-2021
8.	Agile Board Tool	Sahil Goel (205118062)	M.C.A	June-2021
9.	SBAM Admin Application	Rajshi Singhar (205118055)	M.C.A	June-2021
10.	DevOps Automation for Immutable Infrastructure	Praful Waghe (205118049)	M.C.A	June-2021
11.	Identification of Real and Fake Disaster Tweets	Mansi Awasthi (205319007)	M.Sc(CS)	May-2021

(iv) Other contribution(s)

14. Details of Major R&D Projects

Title of Project	Funding Agency	Duration		Status
		From	To	Ongoing/ Completed

15. Number of PhDs guided/ongoing

Name of the Ph.D. Scholar	Title of Ph.D. Thesis	Role (Supervisor/ Co-Supervisor)	Year of Award
Mr. Jinaga Tulasiram	Medical Image Restoration by using Deep Learning Techniques	Supervisor	Ongoing

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Mrs. Cynthia Devi A	Image processing	Supervisor	Ongoing
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16. Participation in Workshops/ Symposia/ Conferences/ Colloquia /Seminars/ Schools etc. (mentioning the role)

Date (s)	Title of Activity	Level of Event (International/ National/ Local)	Role (Participant/ Speaker/ Chairperson, Paper presenter, Any other)	Event Organized by	Venue

17. Workshops/ Symposia/ Conferences/ Colloquia/Seminars Organized (as Chairman/ Organizing Secretary/ Convenor / Co-Convenor)

Title of Activity	Level of Event (International/ National/ Local)	Date (s)	Role	Venue
Internet of Things (IoT)	National	30 <sup>th</sup> August– 1 <sup>st</sup> September 2019	Organizing Chairman	VFSTR Deemed to be University

18. Invited Talks delivered

Topic	Date	Inviting Organization
Variational Approaches for Despeckling and Deblurring of Images	22/12/2020	Dept. of Mathematics, Kakatiya University, Warangal
Block Chain Technology	26/01/2021	KITS, Warangal

19. Membership of Learned Societies

Type of Membership (Ordinary Member/ Honorary Member / Life Member )	Organization	Membership No. with date
Member	IEEE	98177041, (Dec-2022)

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20. Academic Foreign Visits

Country	Duration of Visit	Programme

21. Publications

(A) Refereed Research Journals:

Author(s)	Title of Paper	Journal	Volume (No.)	Page numbers	Year	doi	Impact Factor of the Journal (Optional)
Satyanarayana Teki, <b>Balaji Banothu</b> , Mohan Varma	An Un-realized Algorithm for Effective Privacy Preservation Using Classification and Regression Trees.	Rev. d'Intelligence Artif.	33(4)	313-319	2019	<a href="https://doi.org/10.18280/ria.330408">https://doi.org/10.18280/ria.330408</a>	0.543
P. Jidesh and <b>Balaji B.</b>	Image despeckling with non-local total bounded variation regularization	Computers and Electrical Engineering (Elsevier),	70	631-646	2018	<a href="https://doi.org/10.1016/j.compeleceng.2017.09.013">https://doi.org/10.1016/j.compeleceng.2017.09.013</a>	4.152
P. Jidesh and <b>B. Balaji</b>	Adaptive non-local level-set model for despeckling and deblurring of Synthetic Aperture Radar imagery”,	International Journal of Remote Sensing, (Taylor and Francis)	39	6540-6556	2018	<a href="https://doi.org/10.1080/01431161.2018.1460510">https://doi.org/10.1080/01431161.2018.1460510</a>	3.15
<b>Banothu Balaji</b> , Mohammed Hassan Khan, TSN Murthy, Tai-hoon Kim,	A Defense Mechanism for EOLSR against DOS Attacks in Ad hoc Networks Using Trust Based System	International Journal of Security and Its Applications	8(5)	51-66	2014	<a href="https://doi.org/10.1080/01431161.2018.1460510">https://doi.org/10.1080/01431161.2018.1460510</a>	3.12

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**(B) Conferences/Workshops/Symposia Proceedings**

Author(s)	Title of Abstract/ Paper	Title of the Proceedings	Page numbers	Conference Theme	Venue	Year	doi
Balaji Banothu & Jinaga Tulasiram	Sensitive Lesions and Tumour Detection in Brain using Deep Convolutional Neural Network	IEEE Proceedings		2nd CONIT IEEE Conference	KLE Institute of Technology, Hubli	2022	
Balaji Banothu	Gamma Noise Removal Using High Order Total Bounded Variation Approach	Springer Proceedings		3rd International Conference on Advances in Distributed Computing and Machine Learning (ICADCML)-2022	NIT Warangal	2022	
B.Balaji &P.Jidesh	Non-local Gradient Fidelity Model for Multiplicative Gamma Noise Removal	IEEE Proceedings		ICAPR- 2017, IEEE proceedings.	ISI Bangalore	2017	

**(C) Books & Monographs**

Author(s)	Title of Book/Monograph	Name of Publishers	Year of Publication	ISSN/ISBN Number	doi