# Curriculum Vitae - Dr. Raghavendra Prasad



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Academic Credentials: MTech, Ph.D.

 PhD in Computational Neuroscience and Neural engineering from Department of Biomedical Engineering, National Institute of Technology -Raipur in 2024.

Thesis Title: "Emotion and Cognition Interaction: Mapping Of Neural Dynamicity Using Computational Modelling".

- M.Tech in Computer Cognition Technology from Department of Studies-Computer Science,
   University of Mysore, Karnataka in 2009.
- M.Sc. in Advanced Communication Systems / IT from Department of Studies- Computer Science Bharathiar University, Coimbatore, Tamil Nadu in 2006.
- B.Sc. in Electronic Science from University Of Madras, Tamil Nadu in 2004.
- PG Diploma in Sanskrit Literature from Panini Institute, Pondicherry in 1999.

### **Executive Summary**

14 + years of experience in Academics and 02 years in Industry.

- Associate Professor in Department of CSE, Royal Global University-Guwahati since Sep-2024.
- Associate Professor in Department of CSE (APEX), Chandigarh University since Aug-Sep-2024.
- Deputy Director, IQAC, Research Co-Ordinator, AUC and Assistant Professor-III in Amity School of Engineering and Technology, Amity University Chhattisgarh from Sep-2015 to Jul-2024.
- Assistant Professor-I in A.R. Engineering College, Villupuram (Affiliated to Anna University, Chennai) from 2010 to 2015 in Information Technology dept.

# Core Research Areas

Computational and Cognitive Neuroscience, Cognitive Re-Engineering, Computational Biology ANN
 & Machine Learning applications.

#### Patents (04)

- 1. Filed a Patent titled 'An intelligent automated tiger identification and classification device (ATIC)' bearing Docket No 5553 and application number 201911002171 on 18-01-2019.
- 2. Filed a Patent titled 'A behavior transportation device' bearing Docket No 40376 and application number 202011015713 on 10-04-2020.
- 3. Filed a Patent titled 'A Psychotherapeutic Moral Proctoring Device' bearing Docket No 85901 and application number 202011036250 on 22-08-2020.
- 4. Filed a Patent titled 'A Biodegradable Air Purifier Assembly with Air Particulate Filter' bearing

Docket No: 12382 and application number 202211062831 on 11-03-2022.

# Publications (SCI/WoS/Scopus)

- Prasad, R., Tarai, S. & Bit, A. Emotional reactivity and its impact on neural circuitry for attentionemotion interaction through regression-based machine learning model. Cogn Neurodyn (2024). <a href="https://doi.org/10.1007/s11571-024-10106-z">https://doi.org/10.1007/s11571-024-10106-z</a> (Print ISSN: 1871-4080 Online ISSN: 1871-4099)(SCI: IF:3.8)
- 2. Prasad, R., Tarai, S. & Bit, A. Hybrid computational model depicts the contribution of non-significant lobes of human brain during the perception of emotional stimuli. Computer Methods in Biomechanics and Biomedical Engineering (2024) (Print ISSN: 1025-5842 Online ISSN: 1476-8259) (SCI: IF: 1.9).
- 3. Prasad, R., Tarai, S. & Bit, A. Investigation of frequency components embedded in EEG recordings underlying neuronal mechanism of cognitive control and attentional functions. Cogn Neurodyn (2022). https://doi.org/10.1007/s11571-022-09888-x.(SCI: IF:3.8)
- 4. G.Raghavendra Prasad. 'Understanding Behavioural Transformation of Resuscitative Subjects', International Journal of Psychosocial Rehabilitation, Vol. 25, Issue 02, 2021, ISSN: 1475-7192, pp 313-317. (Scopus: IF:0.2)
- 5. Bit, A., Prasad, Raghavendra, & Tarai, S. (2021). 'Yoga and Meditation Biomarkers for Depression'. In Neurocognitive Perspectives of Prosocial and Positive Emotional Behaviours (bll 6-1-6-21). doi:10.1088/978-0-7503-3383-2ch6.(Scopus)
- Raghavendra Prasad, N.P. Guhan Seshadri, R. Periyasamy, Stephanie Miller, Arindam Bit, Kunal Mitra, "Electroencephalography and near-infrared spectroscopy-based hybrid biomarker for brain imaging", In Woodhead Publishing Series in Electronic and Optical Materials, Bioelectronics and Medical Devices, Woodhead Publishing, 2019, PP- 145-181, ISBN 9780081024201, https://doi.org/10.1016/B978-0-08-102420-1.00009-1. (Scopus)

### **Publications** (UGC Care/Others)

- 1. G.Raghavendra Prasad. 'Machine Learning For Elevated Agricultural Productivity', International Journal of Advance Research and Innovative Ideas in Education, Vol-6 Issue-6 December, 2020, pp-984-987.
- 2. G.Raghavendra Prasad. 'Proactive Health Care And IoT', LangLit, Vol. 7 Issue 2, November, 2020,pp-19-24.
- 3. G.Raghavendra Prasad. 'Intelligent (Artificial) Marketing: A Data Mining Perspective', International Journal of Management, IT & Engineering, Vol. 9 Issue 5, May 2019, pp 243-248. ISSN: 2249-0558.
- 4. G.Raghavendra Prasad. 'Mapping Mental Outcome of Yoga on Stressed subjects by Neuroscientific Methods (EEG, fnirs), Volume-04, Issue-05, May-2019, PP 598-600, ISSN: 2455-3085.
- 5. G.Raghavendra Prasad. 'Cognizing Reality (Sprituality): Beyond Scope of Modern Science', Journal of Emerging Technologies and Innovative Research, Volume 6, Issue 4 April 2019, PP 515-517. (ISSN-2349-5162).
- 6. G.Raghavendra Prasad. 'Neonatal Critical Care Emergency System', American Internal Journal of Research in Science, Technology, Engineering and Mathematics, Volume 1 Issue 22 March-May 2018,pp97-99. e-ISSN: 2328-3580,p-ISSN: 2328-3491.

- 7. G.Raghavendra Prasad. 'Connotation of Artificial Neural Networks (ANN) and MachineLearning (ML): A Healthcare Perspective', International Research Journal of Engineering and Technology (IJRET), Volume 8 Issue 5 May 2018, pp 2193-2195. e-ISSN: 2395-0056, p-ISSN: 2395-0072.
- 8. G.Raghavendra Prasad. 'Near Death Experience (NDE): A Gateway for Positive Psychology?', International Journal of Management, Technology And Engineering (IJAMTES), Volume 8 Issue V May 2018, pp 177-181. ISSN 2249-7455.
- 9. G.Raghavendra Prasad. '*ICT and Gender Bias -Deciphering Barriers*', International Journal of Multidisciplinary Educational Research (IJMER), Volume: 6, Issue: 12, December 2017, pp-194-199. ISSN: 2277 7881.
- 10. G.Raghavendra Prasad<sup>1.</sup>, AB Siddique 'STEM An Iot Based Solution For Tracking Objects', International Journal for Research in Applied Science & Engineering Technology (IJRASET), Volume 5 Issue XI November 2017, pp 2328-2331. ISSN: 2321-9653.
- 11. G.Raghavendra Prasad. 'A Stateless State: Life after Near Death Experience', International Journal of Research in Social Sciences, Vol. 7 Issue 7, July 2017, pp 427-431. ISSN: 2249-2496.
- 12. G.Raghavendra Prasad. 'A Hybrid Auto Surveillance Model Using Scale Invariant Feature Transformation for Tiger Classification', International Research Journal of Engineering and Technology (IRJET), Volume: 04 Issue: 02 | Feb -2017,pp 995-997. e-ISSN: 2395-0056, p-ISSN: 2395-0072.
- 13. G.Raghavendra Prasad. 'An Insight Towards Ict, Pedagogy And Educational Methodology In India', IJAR-International Journal of Advanced Research (2016), Volume 4, Issue 6, pp 1191-1192. ISSN 2320-5407.
- 14. G.Raghavendra Prasad. 'An Algorithmic Approach towards Chest X-Ray Image Enhancement by Global Histogram Equalization', IRA-International Journal of Technology & Engineering, Vol. 03 Issue 01 (April, 2016).pp 28-31. ISSN 2455-4480.
- 15. G.Raghavendra Prasad. 'Birth of Aravanis:Neither a Sin, nor a choice but the Enfleshment of God', The Third Gender: Stain and Pain ,April-2018,pp-240-246. ISBN: 978 93-87966-02-4.

# Conference Proceedings (03)

- G Sireesha<sup>1</sup> ,G.Raghavendra Prasad<sup>1\*</sup> ,'Sowing to Harvesting: A Machine Learning approach for Elevating Productivity' .NCETETM-2019 ,Feb 2019. ISBN: 978-93-85525-50-6.
- Kritika Sharma<sup>1</sup>, G.Raghavendra Prasad<sup>1\*</sup>, 'IoT(BSN) Based Continuous and Comprehensive Health Care using Machine Learning- ICHM'. NCETETM-2019, Feb 2019. ISBN: 978-93-85525-50-6.
- K. Manikant<sup>1</sup>, G.Raghavendra Prasad<sup>1\*</sup>, 'Implementation of Public Mobile Phone Booths In Public Sector'. NCETETM-2019 ,Feb 2019. ISBN: 978-93-85525-50-6.

### Workshops/Conferences/Seminars/FDP (16)

• Presented a paper titled 'Yoga & Meditation: Forgotten Lethal Weapons for Nation Building' in International Conference on "Role of Language, Literature and Culture in Nation Building" at National Institute of Technology Raipur, Chhattisgarh on 22-23, March, 2020.

- Presented a paper titled 'ICT & Social Media: A Game Changer'. International Seminar on "Women Issues and Solutions in the Digital Era" at Mother Teresa Women's University, Kodaikanal, Tamil Nadu on 20 September 2019.
- Participated in 6<sup>TH</sup> Biopesticide International Conference (BIOCICON-2019) organized by Amity University Chhattisgarh and St.Xavier's College, Palayamkottai Tamilnadu at Amity University Chhattisgarh on 06-08 March, 2019.
- Delivered an Invited Keynote address 'Role of ANN in Cognitive Neuroscience' in National Conference on Emerging Trends in Engineering Technology: NCETETM-2019 on 12th -13th Feb 2019.
- Attended a Two Day FDP 'Redefining The Role Of Teachers In Digital Era' at ITM University, Raipur, Chhattisgarh on 23-24 January, 2019.
- Presented a paper 'An Empirical analysis on Likelihood Estimation and Prognosis of Parkinson Disease through Machine Learning' through poster in International Conference 'International Conference On Biomedical Engineering Science and Technology: Roadway from Laboratory to Market (ICBEST 2018)' held at NIT Raipur on December 20-21,2018.
- Participated in National Level Seminar cum Workshop on Innovation & IPR, organized by NRDC-Amity Innovation Facilitation Center under IFC at Amity University Chhattisgarh on 27<sup>th</sup> September 2018.
- Presented a paper titled 'Fortifying Tribal Women through Artificial Intelligence Enabled Smart Care' in ICSSR Sponsored National Conference on Tribal Women Empowerment at Mother Teresa Women's University, Kodaikanal, Tamil Nadu on 23rd July 2018.
- Presented a paper 'Modern Science: A Dimension Yet to Improvise in Understanding Reality (Sprituality)' in an *International Conference* on 'Science, Spirituality and Civilization held at IIT Roorkee on March 16-17, 2018.
- Attended a FDP on 'EI: Building Personalities for Improved Interpersonal relations' at AUC on 03<sup>rd</sup>
   January 2018.
- Attended a FDP on 'Stress Mgmt and better Productivity at Workplace' at AUC on 14 Dec 2017.
- Presented a Paper 'Decoding ICT's Frailty: A Gender Perspective' in National Conference on 'Women Isuuses in Digital Era' on 31st Oct 2017 at Mother Teresa Women's University, Kodaikanal, Tamil Nadu.
- Participated in a 3 day National Level workshop on "Mixed Methods Research" conducted by Regional Medical Research Center-ICMR Bhubaneshwar from 12<sup>th</sup> to 14<sup>th</sup> May 2017.
- Presented a paper titled "Computer Technology and Pedagogy: A Cogent Handshake' to a Triumph Trench in Educational System" in National Seminar at Pragathi College-Raipur on Feb-2016.
- Presented a Paper "Comparative study between Histogram Equalization method and Mathematical Morphology in Medical image Enhancement" at University of Mysore on 2007.
- Presented a Paper "Implementing Technology in Non Conventional Energy Resources" in UGC Sponsored National level conference at Bharathiar University-Coimbatore on 2005.

#### **Academic Activities**

- Organizer "3 Days Entrepreneurship Awareness Camp in association with Entrepreneurship Department Institute of India, Gandhinagar" at Amity University Chhattisgarh on 21-23 August, 2019.
- Organized Seminar cum Workshop on Innovation & IPR, organized by NRDC-Amity Innovation
   Facilitation Center under IFC at Amity University Chhattisgarh on 27<sup>th</sup> September 2018.
- Organizer "MATLAB Workshop" in association with DesignTech System, New Delhi on 07<sup>th</sup> September-2017.
- Organizer "FOSS" Workshop at Amity University Chhattisgarh on 24<sup>th</sup> November 2016.
- Organizing Coordinator "Artificial Intelligence" Expert lecture at Amity University Chhattisgarh on 12&13<sup>th</sup> August 2016.
- Organized JAVA workshop at A.R Engineering College for QIC in association with Spoken Tutorial-IIT Bombay on July 2013.

## Research/Professional Body Associations

- **Member** Editorial Board Member Editorial Board- 'Research Analysis and Evaluation', An International peer reviwed open access Journal (ISSN-2320-5482).
- **Member Editorial Board** 'Shodh, Samiksha Aur Mulyankan', An International peer reviwed open access Journal (ISSN-2320-5474).
- **Member Editorial Board** 'The International Research Journal of Interdisciplinary & Multidisciplinary Studies (IRJIMS)', An International peer reviwed open access Journal (ISSN :2394-7950 Online ISSN : 2394-7969).
- Advisory Board Member, 'The International Society for Engineers and Researchers (ISER)', A
  scientific society dedicated to the promotion of international education and university
  cooperation in the field of Science, Engineering and Technology with peer reviewed international
  Journals.
- **Reviewer**, 'Biomedical and Pharmacology', An International peer reviwed open access Journal (ISSN: 0974-6242 Online ISSN: 2456-2610) (Scopus).
- Reviewer, 'Biomedical signal processing and control.', (Online ISSN: 1746-8108Print ISSN: 1746-8094) (SCIE).
- **Reviewer**, 'Oriental Journal of Computer Science and Technology', An International peer reviwed open access Journal (ISSN: 0974-6471 Online ISSN: 2320-8481).
- Member: Universal Association of Computer and Electronics Engineers (UACEE), International Association of Engineers (IAENG), IAEST, International Association of Computer Science and Information Technology(IACSIT).

### Technical Exposure

Languages : Shell Script, Perl, Python

Platforms : Embedded systems, Matlab, Open Source

Areas : ANN, Data Structures, Algorithms, Computational & Cognitive

Neuroscience

### Knowledge, Skills, & Abilities

Ability to learn and adapt new technologies, Team Worker, Research Driven, Strategic Player

# Responsibilities Associated

• HoD, PG Studies (CSE), ASET/AIIT

- University Coordinator-: Research and Development
- In-Charge, Directorate of IQAC
- Deputy Director- IQAC- Amity University Chhattisgarh
- In-Charge, Directorate of Research and Development (Operations)
- Member & Coordinator-Research Advisory Committee
- Mentor -Institution Innovation Council (IIC)- Amity University Chhattisgarh, MoE Initiative.
- Coordinator- Deep Learning & AI Skills, Amity School of Engineering & Technology, AUC.
- NPTEL SPOC & Coordinator, Amity University Chhattisgarh.
- IIT Spoken Tutorial Coordinator, Amity University Chhattisgarh.

### **Linguistics Ability**

Kannada, Tamil, Hindi, English, Sanskrit, Telugu.

# **Personal Details**

Address for Communication : No: J-602, Ramniketan Apartment, Saddu

Raipur, Chhattisgarh. - 493 111 ,India

I hereby declare that all the details stated above are true to the best of my knowledge and belief.

Place : Mohali

Date : With Regards, (Raghavendra Prasad)