**Curriculum Vitae**



Brief Profile: 1-2 paragraphs (not exceeding 500 words)

Balasubramani N is working as an Assistant Professor in Mathematics at NIT Tiruchirappalli from October 2022. Prior to this, he worked as an Assistant Professor at VIT Vellore from July 2020 to September 2022. He received his PhD degree from IIT Guwahati in 2019. His area of interest include Fractal, Numerical Analysis and Differential Equations.

1. Name: Balasubramani N

2. Designation: Assistant Professor Grade II

3. Office Address: Department of Mathematics,  NIT Tiruchirappalli

4. Telephone (Direct) (Optional):

   Telephone :                        Extn (Optional):

   Mobile (Optional):

5. Email (Primary): balasubramani@nitt.edu          Email (Secondary) : balumaths175@gmail.com

6. Field(s) of Specialization: Fractal, Numerical Analysis and Differential Equations

7.      Employment Profile

| Job Title | Employer | From | To |
|---|---|---|---|
| Assistant Professor (Adhoc) | NIT Puducherry | August 2019 | May 2020 |
| Assistant Professor | VIT Vellore | July 2020 | September 2022 |
| Assistant Professor | NIT | October 2022 | Present |

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

| Examination | Board / University | Year | Division/ Grade | Subjects |
|---|---|---|---|---|
| PhD | IIT Guwahati | 2019 | | Fractal Interpolation |
| Msc | IIT Madras | 2012 | I Class | Mathematics |
| Bsc | St. Joseph's college, Tiruchirappalli | 2010 | I Class | Mathematics |
| 12th Standard | State Board | 2004 | I Class | Tamil, English, Maths, Physics, Chemistry, Biology |
| 10th Standard | State Board | 2002 | I Class | Tamil, English, Maths, Science, Social Science |

9. Academic/Administrative Responsibilities within the University

| Position | Faculty/Department/Centre/Institution | From | To |
|---|---|---|---|
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10. Academic/Administrative Responsibilities outside the University

| Position | Institution | From | To |
|---|---|---|---|
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11. Awards, Associateships etc.

| Year of Award | Name of the Award | Awarding Organization |
|---|---|---|
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| | | |

12. Fellowships

| Year of Award | Name of the Fellowship | Awarding Organization | From (Month/Year) | To (Month/Year) |
|---|---|---|---|---|
| 2013 | UGC-NET | CSIR | October 2013 | - |
| | | | | |
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13. Details of Academic Work
    (i)  Curriculum Development
    (ii) Courses taught at Postgraduate and Undergraduate levels
        1. Linear algebra
        2. Differential equations and Transform techniques
        3. Calculus for Engineers
        4. Statistics for Engineers
        5. Computational Statistics
        6. Complex variables
    (iii)Projects guided at Postgraduate level
    (iv)Other contribution(s)

14. Details of Major R&D Projects

| Title of Project | Funding Agency | Duration | | Status |
|---|---|---|---|---|
| | | From | To | Ongoing/ Completed |
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15. Number of PhDs guided

| Name of the PhD Scholar | Title of PhD Thesis | Role(Supervisor/ Co-Supervisor) | Year of Award |
|---|---|---|---|
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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 |
|---|---|---|---|---|---|

| July 15-29, 2016 | GIAN | National | Participant | IIT Madras | IIT Madras |
|---|---|---|---|---|---|
| December 15-17, 2016 | Conference on Latest Advances in Computational and Applied Mathematics | International | Paper presenter | Mahindra Ecole Centrale | Mahindra Ecole Centrale |
| December 22-23, 2016 | National Conference on Advances in Mathematical Sciences | National | Paper presenter | Gauhati University | Gauhati University |

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 |
|---|---|---|---|---|
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18. Invited Talks delivered

| Topic | Date | Inviting Organization |
|---|---|---|
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19. Membership of Learned Societies

| Type of Membership (Ordinary Member/ Honorary Member / Life Member ) | Organization | Membership No. with date |
|---|---|---|
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20. Academic Foreign Visits

| Country | Duration of Visit | Programme |
|---|---|---|
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21. Publications

(A) <u>Refereed Research Journals</u>:

| Author(s) | Title of Paper | Journal | Volume (No.) | Page numbers | Year | Impact Factor of the Journal (Optional) |
|---|---|---|---|---|---|---|
| N.Balasubramani | Shape preserving rational cubic fractal interpolation function | Journal of computational and applied mathematics | 319 | 277-295 | 2017 | |
| N.Balasubramani, M. G. P. Prasad and S. Natesan | Constrained and convex interpolation through rational cubic fractal interpolation surface | Computational and applied mathematics | 37 | 6308-6331 | 2018 | |
| N.Balasubramani, M. G. P. Prasad and S. Natesan | Rational cubic fractal spline for visualization of shaped data | Neural, parallel, and scientific computations | 26 | 183-210 | 2018 | |
| N.Balasubramani, M. G. P. Prasad and S. Natesan | Fractal quintic spline solutions for fourth-order boundary-value | International journal of applied and computational mathematics | 5 | | 2019 | |

| Author(s) | Title | Journal | Vol | Pages | Year | |
|---|---|---|---|---|---|---|
| | problems | | | | | |
| N.Balasubramani, M. G. P. Prasad and S. Natesan | Fractal quintic spline method for nonlinear boundary-value problems | Hacettepe Journal of Mathematics and Statistics | 49 | 1885-1903 | 2020 | |
| N.Balasubramani, M. G. P. Prasad and S. Natesan | Fractal cubic spline methods for singular boundary-value problems | International journal of applied and computational mathematics | 6 | | 2020 | |
| N.Balasubramani, M. G. P. Prasad and S. Natesan | Shape preserving α-fractal rational cubic splines | Calcolo | 57 | | 2020 | |
| N. Balasubramani and A. Gowrisankar | Affine recurrent fractal interpolation functions | The European Physical Journal Special Topics | 230 | 3765–3779 | 2021 | |

(B) Conferences/Workshops/Symposia Proceedings

| Author(s) | Title of Abstract/ Paper | Title of the Proceedings | Page numbers | Conference Theme | Venue | Year |
|---|---|---|---|---|---|---|
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(C) Books & Monographs

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