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**CONTACT INFORMATION**      **AT-Main Road, In front of Manoj Medical Store, PO-Neelavadi, P.S-Bandhugaon, Dist-Koraput-764027, Odisha, India**

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**Email:** [manasi.sahukar@gmail.com](mailto:manasi.sahukar@gmail.com)

**DATE OF BIRTH**      30 May, 1993

**NATIONALITY**      Indian

**GENDER**      Female

**MARITAL STATUS**      Unmarried

**CATEGORY**      OBC

## **EDUCATION HISTORY**

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July 2015 – June 2020      **National Institute of Technology Rourkela**  
Ph.D in Mathematics  
CGPA-8.83  
Thesis Submission Date: 22<sup>nd</sup> June 2020  
Thesis Defended Date: 6<sup>th</sup> November 2020  
Thesis Title: **A Study on Arithmetic Functions and Diophantine Equations Associated with Balancing and Related Sequences.**

Aug 2013 – May 2015      **National Institute of Technology Rourkela**  
Master of Science in mathematics  
CGPA-7.62

Aug 2010 – May 2013      **Khallikote autonomous College, Berhampur**  
Bachelor of Science in mathematics  
% of marks-77.5

## **RESEARCH INTERESTS**

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**Number Theory** (Elliptic Curve, Diophantine Equation, Recurrence sequences)

## **PUBLICATIONS**

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1. Positive Integer Solutions of Certain Diophantine equations (with B. K. Patel and P.K. Ray), Proceeding Mathematical Sciences, 128 (2018), no. 1, p. 5.  
Link- <https://doi.org/10.1007/s12044-018-0377-4>.
2. Arithmetic Functions of Balancing Numbers (with G. K. Panda), Fibonacci Quart. 56 (2018), no. 3, 246–251.  
Link-<https://www.fq.math.ca/56-3.html>
3. Repdigits in Euler Functions of Pell Numbers (with G. K. Panda), Fibonacci Quart. 57 (2019), no. 2, 134–138.  
Link-<https://www.fq.math.ca/57-2.html>
4. Repdigits in Euler functions of Associated Pell Numbers (with G. K. Panda), Proceeding Mathematical Sciences, 130(1), 25 (2020)  
Link- <https://doi.org/10.1007/s12044-019-0551-3>.
5. Balancing and Balancing-like Numbers Which are One Away from Perfect Powers (with G. K. Panda), Bull Braz Math Soc, New Series 51 (2020), 681-696.  
Link-<https://doi.org/10.1007/s00574-019-00170-z>
6. Diophantine Equations with Balancing-like Sequences Associated to Brocard-Ramanujan-Type Problem (with G. K. Panda), Glasnik Matematicki 54(74) (2019), 255–270.  
Link-<https://doi.org/10.3336/gm.54.2.01>
7. Markov Equation with Components of Some Binary Recurrent Sequences ( with S. G. Rayaguru and G. K. Panda ), Notes on Number Theory and Discrete Mathematics 26(3) (2020), 149–159  
Link- <https://doi.org/10.7546/nntdm.2020.26.3.149-159>
8. Perfect squares in the sum and difference of balancing-like numbers (with Z. Siar, R. Keskin and G. K. Panda), Notes on Number Theory and Discrete Mathematics 28(2) (2022), 286-301.  
Link- [10.7546/nntdm.2022.28.2.286-301](https://doi.org/10.7546/nntdm.2022.28.2.286-301)

## **WORK EXPERIENCE (Research/Teaching)**

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December 2022-Present

**Presidency University, Bangalore, Karnataka**

Assistant Professor

*Responsibilities and/or achievements:*

Subject Taught:

- Applied Statistics (with R programming Lab)
- Calculus and Linear Algebra (with MATLAB programming Lab)

- September 2021-Nov 2022      **Centurion University of Technology and Management, Vizianagaram, Andhra Pradesh**  
Assistant Professor  
*Responsibilities and/or achievements:*  
Subject Taught:
- Statistics in Business Strategies(BBA)
  - Discrete Mathematics (B.Tech)
  - Basic Mathematics for Optometry
- February 2021-July 2021      **Gandhi Engineering College Bhubaneswar**  
Assistant Professor  
*Responsibilities and/or achievements:*  
Subject Taught:
- Mathematics I
  - Mathematics(Diploma)-Vector algebra, Real analysis
  - Mathematics II
- July 2016-Dec 2017      **NIT Rourkela, Odisha**  
Teaching Assistant  
*Responsibilities and/or achievements:*  
Subjects Taught:
- Mathematics I(Analysis and Vector Calculus), Number Theory
  - Practical and labs: Number theory and Numerical Analysis Lab
- July 2014-May 2015      **NIT Rourkela, Odisha**  
M.Sc Research Project  
Thesis Title: Homology theory for cw-complexes.
- May 2014 – June 2014      **IIIT Bhubaneswar, Odisha.**  
Internship (Research in Number Theory)  
*Responsibilities and/or achievements:*
- Worked on a specific problem on number theory and published one article in this duration

### **Conference and Workshops attended**

- Invited Talk *scientific cum popular talk* on ‘Perfect powers in recurrence sequences’, the Centre for Data Science, Siksha ‘O’ Anusandhan Deemed to be University, April 13, 2022.
- International Webinar on “Recent Developments in Number Theory-2020, Department of Mathematics, School of Applied Sciences, KIIT Deemed to be University Bhubaneswar, India, August 17-20, 2020.
- Webinar on “Number Theory and its Related Topics”, Department of Mathematics, Sambalpur University, Sambalpur, India, July 6-15, 2020.
- Conference on “International conference on class groups of number fields and related topics (ICCGNFRT 2019), Harish-Chandra Research Institute, Allahabad, India, October 16-19, 2019.

- Conference on “Diophantine equations with balancing-like sequences associated to Brocard-Ramanujan-type problem”, International Conference on Number Theory and Graph Theory(ICNG 2019), University of Mysore, June 27-29, 2019.
- Workshop attended “Advance Training in Mathematics Schools-Analytic Theory of Algebraic Numbers”, KIIT University, Bhubaneswar, 13<sup>th</sup> June - 2<sup>nd</sup> July, 2016.
- Mathematics Training and Talent Research Programme (MTTS 2014), Regional Institute of Education (RIE), Mysore, India, May 19<sup>th</sup>-June 14<sup>th</sup>, 2014.

**Language Skills:**

- English, Odia (mother tongue), Hindi, Telugu

**INVITED TALKS**

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- On ‘Perfect powers in recurrence sequences’, the Centre for Data Science, Siksha ‘O’ Anusandhan Deemed to be University, April 13, 2022.

**FELLOWSHIPS/ AWARDS**

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- GATE, MHRD, 2017.
- IIT-JAM, 2013.

**REFERENCES**

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- **Prof. Gopal Krishna Panda**  
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Department of Mathematics  
**NIT Rourkela**  
Odisha 769008 India

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- **Prof. Kishore Chandra Pati**  
Professor  
Department of Mathematics  
**NIT Rourkela**  
Odisha 769008 India

Email: kcpati@nitrkl.ac.in

- **Prof. Prapanpong Pongsriiam**  
Department of Mathematics, Faculty of Science,  
Silpakorn University, 6 Ratchamankana Rd.,  
Nakhon Pathom, 73000, Thailand.

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