

Chetan Naik J.

Lead Application Engineer | Embedded System Design

Chetan Naik J, is a postgraduate in Engineering and has more than 12 years of academic and research experience. His academic interests include Embedded Systems, IOT, Microcontrollers and Robotics. He has worked on Arduino programming, Embedded C programming, Python, 3D printing technology, PSOC and Matlab. He has guided UG projects and PG dissertations.

His research is on Underwater communication and Error coding. He has coordinated and worked on various VGST, IEDC-DST, VTU TEQIP, VTU-COE funded projects consultancies. His experience as a researcher in different R&D Centres has led to a passion for developing real-time projects and solutions at an affordable cost, incorporating frugal innovations. Has setup PCB Design skill lab under the AICTE Idea Lab at CIT Bangalore.

Has more than 13 journal publications, 10 conference publications and more than 13 patents to his credit. He is a reviewer for IET Circuits, Devices and Systems and IET Radar, Sonar & Navigation Journals.

Has participated in and conducted workshops and faculty development programs on Embedded system and PSOC 5 LP, Embedded system and ARM 7 Cortex M0, Arduino Board, Matlab Signal Processing toolbox.

Has obtained online certifications on various topics from the University of Colorado system, the State University of New York and the University of Illinois.

Senior Member of the Institute of Research Engineers and Doctors (IRED) and Member of the International Association of Engineers (IAENG).

Best International Young Researcher Award for Underwater communication & IOT from Asian Research in 2024.

Best Paper at IACIT 2022 Conference Reva University Bangalore

Qualifications

- Pursuing Ph.D. in Underwater communication
- M.Tech in VLSI Design and Embedded Systems
- Bachelors of Engineering (B.E.) in Electronics and Communication Engineering,

Experience

Total Experience:12 Years

Academic and Research Experience

- Lead Application Engineer, Ramaiah Skill Academy,
- Trainer and Advisor, Weinkling Private Limited
- Assistant Professor, Cambridge Institute of Technology; MS Engineering College;
- Assistant Professor, Cambridge Institute of Technology (North Campus)
- Senior Research Assistant (R&D), MS Engineering College

Patents Published

1. *"CARBON DIOXIDE AS A FUEL FOR VEHICLES", Patent ID-202241075398, Date of publication-6/12/2022.*
2. *"Text Language Translation through Spectacles using AR Technology", Patent ID-202241075399, Date of publication- 26/12/2022*
3. *"CARBON DIOXIDE AS A FUEL FOR VEHICLES", Patent ID-202241075395, Date of publication- 26/12/2022*
4. *"PRESSURE COOKER WHISTLE DETECTOR", Patent ID-202241075396, Date of publication- 26/12/2022*
5. *"ACCIDENT DETECTION AND ALERT SYSTEM", Patent ID-202241075400, Date of publication- 26/12/2022*
6. *"FACTORY INVENTORY AUTOMATION USING INDUSTRY 4.0 TECHNOLOGIES", Patent ID-202241075401, Date of publication- 26/12/2022*
7. *"Articulated Robotic Arm", Patent ID-202241075402, Date of publication- 26/12/2022*
8. *"HAND GESTURE RECOGNITION-CONTROLLED GAMING", Patent ID-202241075403, Date of publication- 26/12/2022*
9. *"IOT BASED SMART POWER MANAGEMENT SYSTEM USING WSN", Patent ID-202241076031, Date of publication- 27/12/2022*
10. *"Women's safety and Empowerment App using SOS signal and BOT messages Namma Mahileyara Rakshane", Patent ID-202241076045, Date of publication- 28/12/2022*
11. *"OFFLINE ADVERTISING APPLICATION", Patent ID-202241077275, Date of publication- 4/1/2023*
12. *"Online shopping Application for Local shopkeepers (Quicky)", Patent ID-202241077274, Date of publication- 30/12/2022*
13. *"Reduce deterioration of sucrose level in Sugarcane using E coil bacteria", Patent ID-202241077272, Date of publication- 30/12/2022.*

Publication

International Conference Papers

- C. N. J, N. S. R, T. C, S. P. H and J. S, "An IoT-Based Smart Irrigation System Using the Blynk Application," 2024 Third International Conference on Artificial Intelligence, Computational Electronics and Communication System (AICECS), MANIPAL, India, 2024, pp. 1-5, doi: 10.1109/AICECS63354.2024.10956971.
- C. N. J and A. H. N, "Design of DWT-based OFDM Model for Underwater Applications," 2024 Third International Conference on Artificial Intelligence, Computational Electronics

and Communication System (AICECS), MANIPAL, India, 2024, pp. 1-5, doi: 10.1109/AICECS63354.2024.10957510.

- Chetan Naik J, Hariprasad T L, Nandini Kumari B, Sunitha P H, Tejaswini C, SPRAYBOTIC– A STEP TO SAVE PLANTS, International conference on Nano composites for aerospace applications, Cambridge Institute of Technology Bangalore, 2023.
- Chetan Naik J, Lokesh A M, Chaitra S, Jayaprakash S, Indumathi G, IOT BASED SMART WEATHER MONITORING SYSTEM USING BLYNK APPLICATION, International conference on Nano composites for aerospace applications, Cambridge Institute of Technology Bangalore, 2023.
- Chetan Naik J, Sunitha P H, Tejaswini C, Jayaprakash S, Indumathi G, AN IOT BASED SMART IRRIGATION SYSTEM USING WIRELESS SENSOR NETWORKS, International conference on Nano composites for aerospace applications, Cambridge Institute of Technology Bangalore, 2023.
- Naik J, Chetan & Pinjare, S L & P, Cyril, DESIGN OF DWT BASED OFDM MODEL FOR UNDERWATER APPLICATIONS, International conference on Nano composites for aerospace applications, Cambridge Institute of Technology Bangalore, 2023.
- Naik J, Chetan & Pinjare, S L & P, Cyril, DESIGN OF FFT BASED OFDM MODEL USING SIMULINK, International conference on Nano composites for aerospace applications, Cambridge Institute of Technology Bangalore, 2023.
- J. Chetan Naik, S. L. Pinjare, P. M. Pooja; Design and simulation of underwater acoustic sensor materials, third International Conference on “Materials, Computing & Communication Technologies” (ICMCCT 2022), 2022.
- J. Chetan Naik, B. S. Deeksha, H. Girish, Gurusharan Kashetty, T. G. Shivapanchakshari, Manohar Sai Polakam; IoT based home automation using Blynk cloud, third International Conference on “Materials, Computing & Communication Technologies” (ICMCCT 2022), 2022.
- T. Bhargava, H. Kishor Kumar, Pramod Mahalingappa Godi, H. Girish, J. Chetan Naik; IoT based fire alarm system using Blynk app, third International Conference on “Materials, Computing & Communication Technologies” (ICMCCT 2022), 2022.
- Girish H, Jharna Majumdar, Chetan Naik J, Sneha Rachna, Jenita Subhash, D. Antony Louis Piriya Kumar, “Performance Analysis of adaptive enhancement algorithms using Quality Metric Parameters for autonomous navigation of an unmanned mobile platform in a low illumination environment”, 4th International Virtual Conference on Advances in Computing & Information Technology – REVA University Bangalore, 2022.

International Journal Papers

- J. Chetan Naik, S. L. Pinjare, P. M. Pooja; Design and simulation of underwater acoustic sensor materials. AIP Conf. Proc. 8 July 2024; 2965 (1): 020003. <https://doi.org/10.1063/5.0212194>
- J. Chetan Naik, B. S. Deeksha, H. Girish, Gurusharan Kashetty, T. G. Shivapanchakshari, Manohar Sai Polakam; IoT based home automation using Blynk cloud. AIP Conf. Proc. 8 July 2024; 2965 (1): 020006. <https://doi.org/10.1063/5.0215427>.

- T. Bhargava, H. Kishor Kumar, Pramod Mahalingappa Godi, H. Girish, J. Chetan Naik; IoT based fire alarm system using Blynk app. AIP Conf. Proc. 8 July 2024; 2965 (1): 020007. <https://doi.org/10.1063/5.0212325>.
- Chetan Naik J, Santhosh Kumar N, Vishnu G C, Chandana K N, Vinodh R, "AN EVOLUTION OF UNDERWATER VEHICLE FOR UNDERWATER COMMUNICATION", International Journal of Creative Research Thoughts (IJCRT), ISSN:2320-2882, Volume.12, Issue 5, pp.992-999, May 2024
- Girish H, Jharna Majumdhar, Chetan Naik J, Sneh Rachna, Jenita Subhash, D. Antony Louis Piriya Kumar, "Performance Analysis of adaptive enhancement algorithms using Quality Metric Parameters for autonomous navigation of an unmanned mobile platform in a low illumination environment", Article 56, River Publisher, 2022.
- Ajay S.N, Chetan Naik J, Tejaswini C, Sunitha P. H, "Literature Survey on Spectrum Occupancy Measurement", International Research Journal of Modernization in Engineering Technology and Science (IRJMETS), Volume-4, Issue-01, Jan 2022.
- Naik J, Chetan & Pinjare, S L & P, cyril. (2019). DESIGN OF AN OFDM MODEL USING RAYLEIGH AND RICEAN CHANNEL. International Journal of Civil Engineering and Technology. 10. 3345-55. 10.17605/OSF.IO/RQYKH.
- Naik J, Chetan & Pinjare, S L & p, cyril. (2018). UNDERWATER OFDM MODEL USING DWT AND FFT METHODS. International Journal of Civil Engineering and Technology. 9. 1075-1086. 10.17605/OSF.IO/8U32T.
- Tejas G Naik, Chetan Naik J, Abhilasha A, "Slingshot based space rocket launcher", International Journal of Mars Research, ISSN: 2453-8760, Volume-4, Issue-2, 16th march 2017.
- Pooja R, Chetan Naik J, Arun Kumar G C, "IOT BASED SMART CAMPUS", International Journal of Engineering Research in Electronics and Communication Engineering(IJERECE), ISSN: 2394-6849, Volume-3, Issue-10, Page No.47-52, Oct 2016.
- Punitha M, Chetan Naik J, Arun Kumar G C, "SMART DIGITAL INVERTER", International Journal of Engineering Research in Electronics and Communication Engineering(IJERECE), ISSN: 2394-6849, Volume-3, Issue-10, Page No.53-59, Oct 2016.
- Chetan Naik J, Asha Rani, "Wireless Data Transmitter and Receiver using PSOC", M S Journal of Engineering Technology and Research, ISSN: 2395-6933, Volume-3, Page No.52-54, 2015.
- Asharani N, Chetan Naik J, Darshan Kumar C D, "Foot Step Power Generation for Automatic Door Controller", M S Journal of Engineering Technology and Research, ISSN: 2395-6933, Volume-3, Page No.46-51, 2015.
- Divya K R, Chetan Naik J, "Literature Study on Underwater Acoustic Data Modem", M S Journal of Engineering Technology and Research, ISSN: 2395-6933, Volume-3, Page No.11-12, 2015.
- Divya K R, Chetan Naik J, Azarathamma S, "Design of AWGN Channel Using Matlab", M S Journal of Engineering Technology and Research, ISSN: 2395-6933, Volume-3, Page No.8-10, 2015.
- Divya K R, Chetan Naik J, Azarathamma S, "Design of an Underwater Channel using Simulink", M S Journal of Engineering Technology and Research, ISSN: 2395-6933, Volume-3, Page No.5-7, 2015.

- Chetan Naik J, Asha Rani, “A Study on Monkey Face 3D Printing”, M S Journal of Engineering Technology and Research, ISSN: 2395-6933, Volume-3, Page No.1-4, 2015
- Chetan Naik J, Dr. S. L. Pinjare, Dr. Jharna Majumdar, “Linear-Quadratic Regulator Control for Human Following Robot in Straight Path”, International Journal of Innovative Technology and Exploring Engineering (IJITEE), ISSN: 2278–3075, Volume-4 Issue-2, Page No.65-67, July 2014
- Chetan Naik J, Sandeep Kumar Malu, Dr. Jharna Majumdar, “Image based Visual servoing with Linear Quadratic Regulator Control for Mobile Robot”, International Journal of Applied Engineering Research, ISSN: 0973-4562, Volume-9, No.11, Page No. 1357-1358, 2014

National Conference Papers

- Divya K R, Chetan Naik J, Shruthi G, Asha Rani, “Wireless data transmission using PSOC”, 8th National women science congress conference, Nov 2015
- Chetan Naik J, Dr. S. L. Pinjare, Dr. Jharna Majumdar, “Implementation of Image based Visual servoing on Embedded Platform”, National Conference on Electrical & Electronics Engineering, IEEE-HKBKCE student Chapter, Page No. 106, June 2014

Books

1. *PCB Design Lab*, ISBN: 978-93-5980-426-2, Self Publication, 2023
2. *Microcontroller and embedded system*, ISBN: 978-93-5915-722-1, Self Publication, 2023.
3. *Embedded C Basics- A book to start your embedded career*, ISBN:978-93-5913-713-1, Self Publication, 2023.