**Dr. Neeraj Chandnani**

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+918109926811

**Objective**

To obtain a career opportunity in an organization where I can apply my knowledge and skills and learn new things.

**Education Background**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Course/Class** | **Institute/School** | **University/Board** | **Year** | **Percentage** |
| Post Doctoral Fellow (PDF)  | Eudoxia Research University, USA | Eudoxia Research Centre India | 2023-Present | Pursuing |
| Doctor of Philosophy (Ph.D.) | Military College of Telecommunication Engineering (MCTE), Mhow | Devi Ahilya Vishwavidyalaya (DAVV), Indore | 2017- 2023 | 84.40% in Ph.D. Course Work |
| Master of Engineering (M.E.) – Electronics and Communication with specialization in Embedded System and VLSI Design | Shri Vaishnav Institute of Technology and Science (SVITS), Indore | Rajiv Gandhi Proudyogiki Vishwavidyalaya (RGPV), Bhopal | 2013-2016 | 83.40% |
| Bachelor of Engineering (B.E.) – Electronics and Communication | Swami Vivekanand College of Engineering (SVCE), Indore | Rajiv Gandhi Proudyogiki Vishwavidyalaya (RGPV), Bhopal | 2009-2013 | 77.09% |
| XII | Vimala Convent Higher Secondary School (V.C.H.S.S.), Sanawad | Central Board of Secondary Education (CBSE) | 2008-2009 | 71.4% |
| X | Vimala Convent Higher Secondary School (V.C.H.S.S.), Sanawad | Central Board of Secondary Education (CBSE) | 2006-2007 | 67% |

**Experience**

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| --- | --- | --- | --- |
| **College/University/Research Centre** | **Designation** | **Dates** | **Duration** |
| SAGE University, Indore | Assistant Professor | 20/09/2022 to Present |  |
| Military College of Telecommunication Engineering (MCTE), Mhow | Assistant Professor (Civilian Academic Officer) | 01/12/2018 to 19/09/2022 | 3 Years, 9 Months, 19 Days |
| Military College of Telecommunication Engineering (MCTE), Mhow | Adhoc Lecturer (Instructor) | 18/07/2017 to 30/11/2018 | 1 Year, 4 Months, 12 Days |
| Vindhya Institute of Technology and Science (VITS), Indore | Assistant Professor | 22/08/2016 to 17/07/2017 | 10 Months, 27 Days |
| Raja Ramanna Centre for Advanced Technology (RRCAT), Indore | Project Trainee | 12/11/2014 to 11/09/2015 | 10 Months |
| **Total Experience** | 8 Years and 10 Months |

**Research Papers Publication**

1. **Neeraj Chandnani** and C N Khairnar, “Quality of Service (QoS) Enhancement of IoT WSNs using an Efficient Hybrid Protocol for Data Aggregation and Routing”, *SN Computer Science 2023 4:6*, vol. 4, no. 6, pp. 1–30, Sep. 2023, doi: 10.1007/S42979-023-02165-6. **(Scopus Indexed)**
2. **Neeraj Chandnani** and K Verma, “A comparison on type-II fuzzy logic based data encryption techniques in the Internet of Things”, *Journal of Intelligent & Fuzzy Systems*, vol. 44, no. 2, pp. 2109-2116, January 2023, doi: 10.3233/JIFS-220570. [**Science Citation Index Expanded (SCIE)**]
3. **Neeraj Chandnani** and C N Khairnar, “A Novel Hybrid Protocol in Achieving QoS Regarding Data Aggregation and Dynamic Traffic Routing in IoT WSNs”, *Wireless Personal Communications*, Springer, April 2023, doi: 10.1007/s11277-023-10429-w. [**Science Citation Index Expanded (SCIE)**]
4. **Neeraj Chandnani** and C N Khairnar, “A Reliable Protocol for Data Aggregation and Optimized Routing in IoT WSNs based on Machine Learning”, *Wireless Personal Communications*, Springer, April 2023, doi: 10.1007/s11277-023-10393-5. [**Science Citation Index Expanded (SCIE)**]
5. **Neeraj Chandnani** and C N Khairnar, “An Analysis of Architecture, Framework, Security and Challenging aspects for Data Aggregation and Routing Techniques in IoT WSNs”, *Theoretical Computer Science*, Elsevier, Jun. 2022, doi: 10.1016/J.TCS.2022.06.032. [**Science Citation Index Expanded (SCIE)**]
6. **Neeraj Chandnani** and C N Khairnar, “Bio-Inspired Multilevel Security Protocol for Data Aggregation and Routing in IoT WSNs”, *Mobile Networks and Applications*, Springer, pp. 1–20, Feb. 2022, doi: 10.1007/S11036-021-01859-6. [**Science Citation Index Expanded (SCIE)**]
7. K. Verma, **Neeraj Chandnani**, G. Bhatt, and A. Sinha, “Internet of Things and Smart Farming”, *EAI/Springer Innovations in Communication and Computing*, pp. 283–303, 2022, doi: 10.1007/978-3-030-77528-5\_15. (**Scopus Indexed**)
8. **Neeraj Chandnani** and C N Khairnar, “A Comprehensive Review and Performance Evaluation of Recent Trends for Data Aggregation and Routing Techniques in IoT Networks”, *Lecture Notes in Networks and Systems*, Springer, vol. 100, pp. 467–484, 2020, doi: 10.1007/978-981-15-2071-6\_37. (**Scopus Indexed**)
9. **Neeraj Chandnani** and C N Khairnar, “Efficient Data Aggregation and Routing Algorithm for IoT Wireless Sensor Networks,” *IFIP International Conference on Wireless and Optical Communications Networks, WOCN*, IEEE Conference, vol. 2019-December, Dec. 2019, doi: 10.1109/WOCN45266.2019.8995074. (**Scopus Indexed**)
10. **Neeraj Chandnani** and C N Khairnar, “A Novel Secure Data Aggregation in IoT using Particle Swarm Optimization Algorithm,” *2018 International Conference on Advanced Computation and Telecommunication, ICACAT 2018*, IEEE Conference, Dec. 2018, doi: 10.1109/ICACAT.2018.8933784. (**Scopus Indexed**)
11. **Neeraj Chandnani**, A. M. Gupta, Pravin Fatnani, Preet Jain, “Development of Distributed Mains Monitoring and Switching System for Indus Complex”, *IOSR Journal of Electronics and Communication Engineering (IOSR-JECE)*, Electronic ISSN: 2278-2834, Print ISSN: 2278-8735, vol. 10, no. 6, (Nov – Dec 2015), pp. 01-09, 2015, doi: 10.9790/2834-10610109. (**International Journal**)
12. N. Tripathi, **Neeraj Chandnani**, P. Manghwani, M. Trivedi, N. Upadhyay, “Design and Implementation of Robotic Arm”, Advances in Electronics Engineering (AECE-2013) Conference at Swami Vivekanand College of Engineering, Indore, March 15-16, 2013. (**National Conference**)
13. **Neeraj Chandnani**, “Design and Implementation of Digital Clock”, National Level Paper Presentation event, VELLUM, organised under, AAYAAM-2K14 at Shri Govindram Seksaria Institute of Technology and Science, Indore, March 07-09, 2014. (**National Conference**)
14. **Neeraj Chandnani**, “Role of Mathematics in Research”, International Conference (online) on Convergence of Smart Technologies (ICCST- 2021) at Prestige Institute of Engineering Management and Research, Indore, September 03-04, 2021. (**International Conference**)
15. **Neeraj Chandnani**, “Study of Recent advances in Mathematics”, International Conference on Innovative Applications of Emerging Technologies and Management (ICIAETM - 2021) at Prestige Institute of Engineering Management and Research, Indore, April 09-10, 2021. (**International Conference**)
16. **Neeraj Chandnani**, K. Verma, S. Joshi, A. Mangal, M. Sundararajan, A. Mohan, “Application of Mathematics in Research, Education and Medical Science”, *Design Engineering,* ISSN: 0011-9342, vol. 2021, no. 7, pp. 13026-13037, Sep. 2021. (**Scopus Indexed**)
17. **Neeraj Chandnani**, **“**Role and Impact of IoT on Education and Learning”, Book titled, Interdisciplinary Approach in Education and Industrial Requirements**,** ISBN:978-81-947377-0-4. (**Book Chapter**)
18. **Neeraj Chandnani**, “Machine Intelligence, an influence on human behaviour: an interdisciplinary endeavour”, Book titled, Industrial People Management Vol – II, ISBN: 978-81-947377-1-1. (**Book Chapter**)
19. **Neeraj Chandnani**, “Role of Mathematics in Research”, Book titled, A Futuristic Approach to Different Modern Tools and Technology in Mathematical Education, ISBN: 978-81-947377-2-8. (**Book Chapter**)

**Books Publication**

1. Acted as Editor in the Book titled “Data Analytics with Python”, 978-93-55155-65-8, published in October 2022.
2. Acted as Editor in the Book titled “Research Methodology”, 978-93-5515-557-3, published in October 2022.
3. Acted as Editor in the Book titled “Advancement in Biotechnology and Pharmaceutical Mathematics”, ISBN: 978-93-91342-36-4, published in July 2021.
4. Acted as Editor in the Book titled “Recent Trends in Engineering and Technology”, ISBN: 978-93-90856-10-7, published in April 2021.

**Patents**

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| **Title** | **Application Number** | **Country** | **Publication/Grant Date** | **Status**  |
| Space Rover driven by Artificial Neural Network Model | 359953-001 | India | 05/03/2022 and 12/09/2023 | Granted |
| A System and Method for Optimum Wavelet Basis Function Selection for ECG Arrhythmia Denoising using Artificial Intelligence | 2021104217 | Australia | 16/07/2021 | Granted |
|  An Artificial Intelligence based System for Detection of Covid Influence on Human Skin | 2021102184 | Australia | 25/04/2021 | Granted |
| Automatic Attribute Differentiator and Controller for IoT Applications | 2020101612 | Australia | 02/08/2020 | Granted |
| A Crop Health Monitoring System using Machine Learning | 202121048702 | India | 10/12/2021 | Published |
| A Smart Stick Solution for Assisting Blind People usingInternet of Things | 202121042381 | India | 29/10/2021 | Published |
| A novel hybrid Renewable Power Platform to Harvests Wind, Solar and Water Current Power from running Water-Channel | 202031036679 | India | 18/09/2020 | Published |
| A novel manufacturing of Sustainable Paints from waste Tyres | 202031033066 | India | 04/09/2020 | Published |
| A System and Method to prevent Unconscious Driving Behaviours | 202041042968 | India | 09/10/2020 | Published |
| An Apparatus for Sanitization and Pasteurization of Eggs | 202021025300 | India | 17/07/2020 | Published |
| Design and Development of RFID and Finger Print based Centralized Voting System | 202041046698 | India | 06/11/2020 | Published |
| Design and Implementation of Home Automation using Voice Recognitionand IoT | 202041042683 | India | 09/10/2020 | Published |
| Design of Luminous Light for Vehicle Monitoring System using IoT  | 202041031102 | India | 31/07/2020 | Published |
| Development of Intelligent Traffic Control for Emergency Vehicle Clearance | 202041024932 | India | 19/06/2020 | Published |
| Development of IoT based System to detect and prevent Child Abuse | 202041027328 | India | 10/07/2020 | Published  |
| Development of Real Time Traffic Control System using Digital Image Processing | 202041038823 | India | 25/09/2020 | Published |
| Water Impurity Detection using Internet of Things (IoT) for Smart City | 202041025992 | India | 03/07/2020 | Published |

**Copyrights**

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| --- | --- | --- | --- | --- |
| **Title** | **Diary Number** | **ROC Number** | **Country** | **Status** |
| A Smart Stick Solution for Assisting Blind People using Internet of Things | 22609/2021-CO/L | L-109118/2021 | India | Registered |
| A Crop Health Monitoring System using Machine Learning | 25982/2021-CO/L | Not Generated | India | Scrutiny |

**Projects**

1. Single Point to Multi Point Detonation Assistant
2. Integrated Accident Prevention System (IAPS)
3. Portable Remote Improvised Explosive Device (IED) Detonation Equipment (PRIDE)
4. Line Follower Robot
5. Robotic Arm

**Trainings/Workshops**

1. MATLAB
2. Basic Circuit Designing and autonomous Robotics
3. PCB Designing
4. Arduino, 8051 Microcontroller
5. C, C++
6. Steps2Research
7. Networking
8. Android App Development
9. Industrial Visit at BSNL, Indore
10. Industrial Visit at Scientech Learning Centre

**Achievements**

1. Author of the Most Innovative research for paper titled “Study of Recent Advances in Mathematics” in International Conference on Innovative Applications of Emerging Technologies and Management (ICIAETM-2021).
2. A token of appreciation by Commander, in recognition of committed Instructional services to Military College of Telecommunication Engineering (MCTE), Mhow.
3. Best paper presentation at 16th IEEE International Conference on Wireless and Optical Communications Networks (WOCN-2019).
4. Secured second position in national level paper presentation event.
5. Participated in College-Level Texas Instruments Innovation Challenge – India Analog Design Contest 2014.
6. Winner in basketball competition in XI standard.
7. Runner up in cricket competition in XI standard.
8. Runner up in football competition in VIII standard.

**Co-curricular Activities**

1. Member of Electronics and Communication Department activity Club at College.
2. Trainer and coordinator of Workshop on Microcontroller.
3. Co-Event head in Robo Race event in Taarunyam Techfest.
4. Volunteer at help desk in Techfest.
5. Science model Exhibition in IX standard.
6. Participated in Cipel’s Global Testing of Mathematics.

**Strength**

1. Punctual
2. Hard Working
3. Discipline

**Weakness**

1. Focused
2. Patience
3. Humour

**Personal Details**

1. **Address:** 74 Paramhans Nagar, “RADHAKRISHNA VILLA” Opposite 18 Houses, Behind Aerodrome Thana, Indore – 452005 (Madhya Pradesh) (INDIA)
2. **Alternate Contact No.:** +917999046214
3. **Languages Known:** Hindi, English and Sindhi
4. **Date of Birth:** 04/12/1991