Dr Harjit Pal Singh

List of publications

## A. Research Papers in Referred Journals

1. Vikas Khullar, Harjit Pal Singh, " Spoken-Buddy for Individuals with Autism Spectrum Disorder", Asian Journal of Psychiatry, Vol 62, 2021 (Impact-13.87 ) Science Direct/Elsevier, SCI (<https://www.sciencedirect.com/science/article/abs/pii/S1876201821001684?via%3Dihub>)
2. Vikas Khullar, Harjit Pal Singh, and Manju Bala, "IoT Based Assistive Companion for Hypersensitive Individuals (ACHI) with Autism Spectrum Disorder", Asian Journal of Psychiatry, 2019 Impact Factor 13.89, Elsevier, SCI

<https://www.sciencedirect.com/science/article/abs/pii/S1876201819306847>)

1. Vikas Khullar, Harjit Pal Singh, Yini Miro, Divya Anand , Heba G. Mohamed, Deepali Gupta,Navdeep Kumar and Nitin Goyal, “IoT Fog-Enabled Multi-Node Centralized Ecosystem for Real Time Screening and Monitoring of Health Information, 2022, Impact Factor (2.838)

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1. Harjit Pal Singh, Sarabjeet Singh, J Singh, S A Khan “VoIP-State of Art for Global Connectivity- A Critical Review”, Journal of Networking and Computer Applications, Vol.37, No.1, pp:365-379, 2014 (Impact factor- 7.574) Elsevier, SCI

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1. Vikas Khullar, Harjit Pal Singh, “ Vocal Friends : Internet of Social-Things Framework to Aid Verbal Communication”, Disability and Rehabilitation-Assistive Technology, 2022, (Impact-2.5) *Taylor & Francis* SCI (<https://www.tandfonline.com/doi/abs/10.1080/17483107.2022.2060349?journalCode=iidt20>)
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4. Vikas Khullar, Harjit Pal Singh, “ Meltdown/Tantrum Detection System for Individuals with Autism Spectrum Disorder”, Applied Artificial Intelligence, Vol 21, 2021 (Impact-1.58) *Taylor & Francis* SCI ([https://www.tandfonline.com/doi/full/10.1080/08839514.2021.1991115)\](https://www.tandfonline.com/doi/full/10.1080/08839514.2021.1991115%29%5C)
5. Vikas Khullar, Harjit Pal Singh and Manju Bala, "Deep Neural Network-Based Handheld Diagnosis System for Autism Spectrum Disorder", Neurology India, Medknow Publications, Vol 69, 2021, pp: 66-74 (Impact-2.708 ), SCI (<https://www.neurologyindia.com/article.asp?issn=0028-3886;year=2021;volume=69;issue=1;spage=66;epage=74;aulast=Khullar;type=0>)
6. Shally Gujral, Kamaljit Singh Bhatia, Harjitpal Singh, Harsimrat Kaur, Nancy Gupta, “Investigations on structural and magnetic properties of M- Type hexagonal ferrite Ba0.5Sr0.5CoxLaxFe12-2xO19 in X-Band”, Journal of Materials Science: Materials in Electronics, Vol 32, 2021, pp: 3255–3263 (Impact 2.779), Springer, SCI (<https://link.springer.com/article/10.1007/s10854-020-05074-z>)
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10. Harjit Pal Singh, Sarabjeet Singh, R.K.Sarin ,Jasvir Singh, “Evaluating the perceived voice quality on VoIP network using interpolated FIR filter algorithm ” International Journal of Electronics, , Vol. 99, No. 10, pp: 1449-1469, **2012** (**Impact factor- 1.457**), **Taylor & Francis, SCI** (<https://www.tandfonline.com/doi/abs/10.1080/00207217.2012.669722>)
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14. Harjit Pal Singh, Vikas Khullar, and Monica Sharma, “Estimating the Impact of Covid-19 Outbreak on High-Risk Age Group Population in India”, Augment Human Research vol. 5, 2020, Springer (<https://link.springer.com/article/10.1007/s41133-020-00037-9>)
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21. Suraj Bhan, Harjit Pal Singh, Vaneet Kumar, Manjeet Singh, "Threshold and Gain Characteristics of Brillouin Back- Scattered Stokes Mode in Magnetized Iii-V Semiconductors", Journal of Gujarat Research Society, **2019**, UGC-CARE (<http://gujaratresearchsociety.in/index.php/JGRS/article/view/151>)
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**B. Book Chapter (s)**

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2. Karuna, Vikas Khullar, Harjit Pal Singh and Suyeb Ahmed Khan, “Diagnosis of Attention Deficit Hyperactivity Disorder- An Intelligent Neuroimaging Perspective: Diagnosing ADHA and Intelligent Neuroimaging”, Impact of Deep Learning and IoT on Multi-Industry Applications, IGI Global, 2020 (<https://www.igi-global.com/chapter/diagnosis-of-attention-deficit-hyperactivity-disorder/270414>)
3. G Singh, Harjit Pal Singh, A Sharma, “Comparative analysis of energy efficient routing protocols SEP, TSEP & DSEP for wireless sensor networks”, [Advances in Intelligent Systems and Computing](http://link.springer.com/bookseries/11156), Springer. Volume 259, pp 75-85, 2014 (ISBN-978-81-322-1767-1) (<https://www.springerprofessional.de/en/comparative-analysis-of-energy-efficient-protocols-for-prolonged/4644354>)

**C. Papers in the Proceedings of International Conferences**

1. V Kumar, Harjit Pal Singh and M Bala, “Autism: Investigation & Interactive use of Signal Processing Algorithms”, International Conference on Sciences, Engineering and Technical Innovations(IMTC 16) , Department(s) of CSE and ECE at CT Institute of Engineering management and Technology , Jalandhar, June 3-4, 2016
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5. M Sharma, Harjit Pal Singh, J Singh, M Bala, "Performance Evaluation of Wireless VoIP under Pervasive Conditions”, in Proceedings of International Multi Track Conference on Sciences, Engineering & Technical Innovations, India, 2014, pp:101-105
6. S Chand, Harjit Pal Singh, J Singh, M Sharma, “Simulative Analysis of Spectral Parameters for Wireless VoIP”, in Proceedings of International Multi Track Conference on Sciences, Engineering & Technical Innovations, India, 2014, pp:119-122
7. J Khan, H L Sharma, Harjit Pal Singh, S A Khan, “Simulative Analysis of Heterogeneous WSN System for Energy Efficient”, in Proceedings of International Conference on Electronics Engineering and Image Processing, Pataya, Thailand, pp: 52-56, **2014**
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14. Sarabjeet Singh, Harjit Pal Singh, Jasvir Singh, “Spectral Analysis of Speech Quality in VoIP for G.729A and AMR-WB Speech Coders”, In Proceedings of **IEEE** Second International Conference on Computational Intelligence, Communication Systems and Networks, **2010**, pp. 182-187, Liverpool, United Kingdom.
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**D. Book**

Harjit Pal Singh, Anurag Sharma, Vikas Khullar, “Futuristic Design and Intelligent Computational Techniques in Neuroscience and Neuroengineering”, 2022, IGI Global USA

**D. Patent(s)**

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| **S. No** | **Application Number** | **Patent Title** | **Status** | **Country**  | **Date**  |
| 1 | 202011045104(Utility Patent) | IOT Based Healthcare Queue Management System | Published | Indian | Nov 6, 2020 |
| 2 | 202111015412(Utility Patent) | Fuzzy Logic Based Dust Flow Prevention Device For Vehicles | Filed | Indian | March 31, 2021 |
| 3 | 202111015410(Utility Patent) | Speech Signal Enhancement System | Filed | Indian | March 31, 2021 |
| 4 | 202111015411(Utility Patent) | Grain Sack Monitoring System | Filed | Indian | March 31, 2021 |
| 5 | 202111034230(Utility Patent) | Ergonomic Based User Assistance System | Filed | Indian | July 7, 2021 |
| 6 | 348031-001(Design Patent) | Mobile Medication Computer ICU Trolley | Granted | Indian | August 17, 2021 |
| 7 | 2021103430(Innovation Patent) | System and Method For Detecting COVID Affected Person For Avoiding Virus Transmission And Maintaining COVID-Guidelines | Granted  | Australian | March 9, 2022 |
| 8 | 353447-001(Design Patent) | Intelligent Antenna  | Granted  | Indian | Jan13, 2022 |
| 9 | 357551-001(Design Patent) | Smart antenna  | Filed and FER submitted  | Indian | Feb 24, 2022 |
| 10 | 202111054785(Utility Patent) | Garment To Detect and Assist in Neurological Disorder | Filed | Indian | Nov 27, 2021 |
| 11 | 357550-001(Design Patent) | Antenna  | Filed and FER submitted | Indian | Feb 24, 2022 |