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)

(<https://www.mdpi.com/2076-3417/12/19/9845/pdf>)

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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3. H Kaur, M Kumar, A K Sharma and Harjit Pal Singh, "Design and analysis of SRRC filter in wavelet based multiuser environment of mobile WiMax”, International Journal Advanced Intelligence Paradigms, Vol. 21, Nos. 3/4, 2022, (Scopus, Scopus, Scimago Q2) (<https://www.inderscienceonline.com/doi/10.1504/IJAIP.2022.122190>)
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)\>
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>)
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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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**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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3. Harjit Pal Singh, K Chawala, N P Singh M Mahajan, , “Internet of Things Based Authentication Security Mechanism for the Healthcare Applications”, International Conference on Sciences, Engineering and Technical Innovations, Department(s) of CSE and ECE at CT Institute of Engineering management and Technology , Jalandhar
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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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**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 |