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| C:\PIYUSH PICS GOOD\Pic_New-removebg-preview (1).png | **Dr. Piyush Kumar Shukla, PDF (Computer Engineering) & PhD (Computer Science & Engineering), Department of Computer Science & Engineering, Academic Block-X, Room No: 302,** Airport Road, Gandhi Nagar, Bhopal - 462033 MP, **UIT**- Rajiv Gandhi Proudyogiki Vishwavidyalaya, (Technological University of Madhya Pradesh), India, **Mobile: +91-9425378576 ((WhatsApp), +91-7000597284**  **Official Website:**[www.rgtu.ac.in](http://www.rgtu.ac.in/)  **Web Link:**[**https://drpiyushkumarshukla.in/**](https://drpiyushkumarshukla.in/)  **Scopus: *https://www.scopus.com/dashboard.uri?origin=NO%20ORIGIN%20DEFINED&zone=TopNavBar***  **Google Scholar:**<https://scholar.google.com/citations?user=XMI2L38AAAAJ&hl=en>  **ORCID: *https://orcid.org/0000-0002-3715-3882***  **ResearchGate:**<https://www.researchgate.net/profile/Piyush_Shukla14>  **Publons:**<https://publons.com/researcher/3307025/dr-piyush-kumar-shukla/>  **Web of Science (ResearcherID):** [AAA-1785-2020](https://publons.com/researcher/AAA-1785-2020/)  **Official Email: piyush@rgtu.net**  **Personal Email:**[**pphdwss@gmail.com**](mailto:pphdwss@gmail.com)**,** [**pphdw@yahoo.co.in**](mailto:pphdw@yahoo.co.in)**;** |

* **Academic Qualification**

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| **S.No.** | **Qualification** | **Discipline** | **Date of Completion** | **University/Institute/ Board** | **Result** |
| 1 | Post Doc | Computer Engineering | March 2020 | SVNIT-Surat, Gujarat, India | Completed |
| 2 | PHD | Computer Science & Engineering | July 2013 | UIT-RGPV, Bhopal, M.P. India | Completed |
| 3 | M.Tech | Computer Science & Engineering | December 2015 | SATI-RGPV, Vidisha, M.P. India | First |
| 4 | BE | Electronics &Communication Engineering | June 2001 | LNCT-RGPV, Bhopal, M.P., India. | First |
| 5 | HSS | PCM | June 1997 | M.P. Board, Bhopal, M.P., India | First |

* **Research Areas of Interest**

White Box Cryptography, Information Security & Privacy, Cyber Security, Dynamic Wireless Network, Blockchain, Machine learning, Internet of Things (IoT), Image Processing. , Medical Imaging, Flying Ad-hoc Network.

* **Biography**

**1.** **Dr Piyush Kumar Shukla (PDF*, PhD, SMIEE, LMISTE)*** Associate Professor in Computer Science & Engineering Department, University Institute of Technology, Rajiv Gandhi Proudyogiki Vishwavidyalaya (Technological University of Madhya Pradesh). He obtained his B.E. (Electronics & Communication Engineering) form RGPV (LNCT), M.Tech. (Computer Science & Engineering), RGPV (SATI). He has completed Post Doctorate Fellowship(PDF) recently (March, 2020) under **"Information Security Education and Awareness Project Phase II" funded**by Ministry of      Electronics and Information Technology (MeitY), from SVNIT Surat, Gujarat, India from Department of Computer Engineering. He has published more than 100 research papers, book chapters and books at National/International level that includes very resent **IEEE/ACM Transactions** on Computational Biology and Bioinformatics paper on **“Deep bidirectional classification model for COVID-19 disease infected patients**, **SCIE, Impact Factor 3.1,** July 20 of 2020, **DOI:**[10.1109/TCBB.2020.3009859](https://doi.org/10.1109/TCBB.2020.3009859) & **“Most downloaded Paper in May-2020, “Deep Transfer Learning Based Classification Model for COVID-19 Disease” IRBM (Innovation and Research in Biomedical engineering), SCI, Elsevier, Impact Factor 1.022, 20 May 2020,** <https://doi.org/10.1016/j.irbm.2020.05.003>. He is currently editing 05 Books on **Blockchain for Information Security & Privacy, IoT in Healthcare: Applications, Benefits, Challenges, and Case Studies** **(CRC Press/Taylor & Francis),** Innovative Engineering With AI Applications (Wiley-SP), Internet of Everything (IoE) for Biomedical Applications (CRC Press/Taylor & Francis-AAP); Intelligent Sensor Node-based Systems and Applications in Engineering and Sciences (CRC Press/Taylor & Francis-AAP).**.** He is an active reviewer and editorial member of more than 10 reputed International Journals in his research areas, such as IEEE Transactions, Elsevier Journals, and Springer Journals etc. He has teaching and research experience of 15 years. He has been Assistant Registrar, Academic (PhD), Co-Coordinator of Intellectual Property Right Cell (RGPV), Co-Coordinator AICTE at RGPV. Dr. Shukla has been delivering so many lectures. He is the recipient of many awards and recognitions like Selected for Best Researcher Award-2020, 2nd International Research Awards on Science, Health and Engineering by International Research Awards Science father, India. He has delivered more than 25 Expert Lecture and Chaired many Technical Sessions in International Conferences across the world such as the USA. He is also a member of many National Professional bodies like **IEEE (Senior Member**), **ISTE (Life Member)**. He has Project Grants under In progress: 01, Principal Investigator (PI), Titled **“Precision Agriculture: Smart Farming with IoT and Drone for increasing productivity of Crops in India”** worth of Rs. 3.0 Lakh under research grant funded by TEQIP-III, RGPV, Bhopal. He has delivered more than 25 Expert Lecture and Chaired many Technical Sessions in International Conferences across the world such as the USA., applied for other Project grant in SERB, DST, MPCST scheme and several other schemes of Govt. of India. His research interest includes Machine Intelligence, Medical Image Processing, and White-Box Cryptography. He has Supervised 07 PhD Scholars and 50 M. Tech dissertations till date. He has served the department in the capacity of PG In-charge/Coordinator M. Tech, DDIPG programs, Department Coordinator NBA, NAAC, and NIRF & also as HoD several times.

**Research Project:**

Principle Investigator of ongoing project **" Precision Agriculture: Smart Farming with IoT and Drone for increasing productivity of Crops in India” worth of Rs. 3.0 Lakh** under research grant funded by TEQIP-III, RGPV, Budget: 3 Lakh, Duration: 01 year (Ongoing)**.** He has also been a Principal Investigator (PI) for the research proposal under consideration **“Design and Development of a System for Obstructing the Unauthorized Information in Social Network”** worth of Rs. 3.0 Lakh under research grant funded by TEQIP-III, RGPV. Budget: 3 Lakh, Duration: 01 year (In Pipeline)**.**

* **Books (A) Edited**
* **(I)** Book Title **“Utilizing Blockchain Technologies in Manufacturing and** L**ogistics Management, IGI-Global, USA,** Editors\* : Dr S.B. Goyal, Dr. Pradeep N. , **Dr Piyush Kumar Shukla**. …………..**Under Publication.**
* (2) Book Title **“Intelligence of Things: AI and IOT Based Critical Applications and Innovations”,** Editors: Dr. Fadi Al-Turjman, Near East University, Turkey, Dr. Anand Nayyar, Duy Tan University, Da Nang, Viet Nam, Dr. Ajnatha Devi, AP3 Solutions, India, **Dr. Piyush Kumar Shukla,** Springer Publications.……. **Under Publication.**
* **(3)** Book Title **“Blockchain for information Security & Privacy”, \*Publisher: \*** CRC Press, Taylor & Francis Group, **Editors:** Dr. Udai Pratap Rao, **Dr. Piyush Kumar Shukla,** Chandan Trivedi, Sweta Gupta, Dr Zelalem Sintayehu Shibeshi, …………. **Under Publication.**
* **(4) Dr. Piyush Kumar Shukla et al., IoT in Healthcare: Applications, Benefits, Challenges, and Case Studies (CRC Press/Taylor & Francis), ISBN No.: I**SBN: 978-0-367-70214-4………… **Under Publication.**
* **(5)** Book Title:\* **Intelligent Sensor Node based System & Application in Engineering and Sciences, \*Publisher:\*** Apple Academic Press-CRC Press, Taylor & Francis Group,\*Submission I'd:\* [isnbs.aes@gmail.com](mailto:isnbs.aes@gmail.com), Editors\* : Dr Anamika Ahirwar, **Dr Piyush Kumar Shukla,** Dr Prashant Shukla, Dr Ruby Bhatt. …………..**Under Publication.**

**(6)** Book Title: \* **Internet of Everything (IoE) for Biomedical Applications”**

\*Publisher:\* Apple Academic Press-CRC Press-Taylor & Francis Group

\*Submission I'd:\* [ioebioapp@gmail.com](mailto:ioebioapp@gmail.com),  \*Editors\* : Dr Vandana Roy, **Dr Piyush Kumar Shukla,** Dr Anoop Chaturvedi, Dr Priti Maheshwary.. **Under Publication.**

**(7)** \*Book Title:\* **Innovative Engineering with AI Applications**, \*Publisher:\* Scrivener Publishing-John Wiley and Sons, \*Submission I'd:\* [iewaiapp@gmail.com](mailto:iewaiapp@gmail.com), \*Editors\* : Dr Anamika Ahirwar, **Dr Piyush Kumar Shukla**, Dr Manish Shrivastava, Dr Priti Maheshwary, Dr Bhupesh Gour……… **Under Publication.**

* **Books (B) Published With International Publishers**
* **A Practical Approach: Working with Windows,** Server Operating System, , Mrs. Sweta Gupta, Dr. Piyush Kumar Shukla, Dr. Manmohan Singh, LAP LAMBERT Academic Publishing, Germany, ISBN-13: 978-620-0-65579-0, Dated: 02-03-2020.
* **A Practical Solution Data Structure,** Dr. Manmohan Singh, Dr. Piyush Kumar Shukla, Dr. Amit Datta, LAP LAMBERT Academic Publishing, ISBN-13: 978-620-0-57185-4, Dated, 11-02-2020.
* **Practical Approaches in Database Management Systems”,** Nilesh kumar Parmar, Ramesh Prasad Aharwal, Piyush Kumar Shukla, LAP LAMBERT Academic Publishing, Germany, ISBN-13: **978-613-9-92516-2, Dated 16-10-2018.**
* **SCI/SCIE Journal Paper Published/Accepted (Total=21)**

1. Prashant Kumar Shukla, **Piyush Kumar Shukla,** Mukta Bhatele, Anoop Kumar Chaturvedi, Poonam Sharma, Murtaza Abbas Rizvi, Yadunath Pathak, **“A Novel Machine Learning Model to Predict the Time of Staying Time of International Migrants”,** Journal: International Journal on Artificial Intelligence Tools. Publisher: World Scientific Publishing Company. Publication date: 06/01/2021, DOI: <https://doi.org/10.1142/S0218213021500020C>, Impact Factor**: 0.778**
2. Anand Motwani, **Piyush Kumar Shukla** & Mahesh Pawar, **“Novel framework based on deep learning and cloud analytics for smart patient monitoring and recommendation (SPMR)”,** Journal of Ambient Intelligence and Humanized Computing, Springer, 2021, **SCIE, Impact factor: 4.591,** doi.org/10.1007/s12652-020-02790-6. Q-2……**Citation (0)**
3. Vandana Roy, Prashant Kumar Shukla Amit Kumar Gupta, Vikas Goel, Piyush **Kumar Shukla**, Shailja Shukla, **“Taxonomy on EEG Artifacts Removal Methods, Issues, and Healthcare Applications,”** Journal of Organizational and End User Computing (JOEUC), IGI Global, Vol. 33, Issue. 1, **SCIE, Impact factor: 1.093, …………..(Citation 0 )**
4. Manish Gupta, Kamlesh Kumar Gupta, **Piyush Kumar Shukla, “Session Key based Fast, Secure and Lightweight Image Encryption Algorithm"**, accepted on October 2020 in Multimedia Tools and Applications, Springer Publications, **SCIE, Impact Factor 2.31** Q-2.
5. Prashant Kumar Shukla, Jasminder Kaur Sandhu, Anamika Ahirwar, Deepika Ghai, Priti Maheshwary, and \***Piyush Kumar Shukla**,” Multi-objective Genetic Algorithm and Convolutional Neural Networks based COVID-19 Identification in Chest X-ray images,” Mathematical Problem in Engineering, Special issue in Meta-Heuristic Techniques for Solving Computational Engineering Problems, Acceptance Date: October, 2020 Publication Date: 01 January 2021. Impact Factor: 1.009, SCIE-Q-2.
6. D. Pandey, U. Rawat, N.K. Rathore, K. Pandey, **P. K. Shukla,** “Distributed Biomedical Scheme for Controlled Recovery of Medical Encrypted Images,”, IRBM, Elsevier, <https://doi.org/10.1016/j.irbm.2020.07.003>, July 22, 2020, SCIE, Impact Factor 1.002, ……………………………….…. Q-2
7. **Yadhunath Pathak, Piyush Kumar Shukla, K.V. Arya, “Deep bidirectional classification model for COVID-19 disease infected patients”,** **IEEE/ACM Transactions** on Computational Biology and Bioinformatics, **SCIE, Impact Factor 3.1,** July 20 of 2020, **DOI:**10.1109/TCBB.2020.3009859...Q-1.
8. Y.Pathak, P.K.Shukla, A.Tiwaric, S.Stalin, S.Singhe, **P.K.Shukla\* “Deep Transfer Learning Based Classification Model for COVID-19 Disease” IRBM (Innovation and Research in Biomedical engineering), SCI, Elsevier, Impact Factor 1.022, 20 May 2020,** <https://doi.org/10.1016/j.irbm.2020.05.003>)...................................Q-2
9. Prashant Kumar Shukla, **Piyush Kumar Shukla**, Poonam Sharma, M.A.Rizvi, Anoop Chaturvedi, Mukta Bhatele, Yadhunath Pathak**, “ A Novel Support Vector Machine based Immigration Stay Time Prediction,”, Journal of Artificial Intelligence Tools World Scientific Journal, (SCIE) (Accepted on 25th June 2020)**…Impact Factor  0.849……………. Q-2
10. Aumreesh Kumar Saxena, Sitesh Kumar Sinha, **Piyush kumar Shukla,** Ratnesh Dubey, Sadhna Mishra, **“, Multi Agent Based Intrusion Detection System using Artificial Immune System for Distributed Network”,** ACM Transactions on Multimedia Computing Communications and Applications (TOMM), ACM Computing **(Accepted on 06 January 2020)………**………………………………,.Impact Factor  2.87.. Q-1
11. Prashant Kumar Shukla, **Piyush Kumar Shukla**, Poonam Sharma, Paresh Rawat, Jashwant Samar, Rahul Moriwal, Manjit Kaur**, “Efficient prediction of drug–drug interaction using deep learning models,”** IET Systems Biology, IET Journals, ISSN 1751-8849, 24 April 2020, doi: 10.1049/iet-syb.2019.0116 [www.ietdl.org](http://www.ietdl.org). ………………**Impact Factor 1.392**.. Q-2
12. Shraddha Pandit, **Piyush Kumar Shukla,** Akhilesh Tiwari, Prashant Kumar Shukla, Manish Maheshwari, Rachana Dubey, **“Review of video compression techniques based on fractal transform function and swarm intelligence,”** International Journal of Modern Physics B (IJMPB), World Scientific Publishing Company (WSPC), 30/03/2020, Vol. 34, No. 08, 30/03/2020, [**doi.org/10.1142/S0217979220500617**](about:blank)**.Impact Factor** 0.836. Q-2
13. Ankur Pandey, **Piyush Kumar Shukla,** Ratish Agrawal, **“An adaptive Flying Ad-hoc Network (FANET) for disaster response operations to improve quality of service (QoS),”** Modern Physics Letters B (MPLB),World Scientific Publishing Company (WSPC), Vol. 34, No.10, 30/03/2020, [**https://doi.org/10.1142/S0217984920500104**](about:blank)..... **Impact Factor** 0.929... Q-2.
14. Chaturvedi, A.K., Shukla, P.K. “**Effective watermarking technique using optimal discrete wavelet transform and sanitization technique”.** Multimedia Tools & Applications, Springer (2020). [https://doi.org/10.1007/s11042-020-08639-6](about:blank)... **Impact Factor** 2.101.............. Q-2.
15. Ruby Bhatt, Priti Maheshwary, Piyush Kumar Shukla, Prashant, Shukla, Manish Shrivastava, Soni Changlani, Computer Communications, Elsevier, Volume 149, January 2020, pp. 134-14, [https://doi.org/10.1016/j.comcom.2019.09.007](about:blank)... **Impact Factor** 2.816... Q-2.
16. **Tomar, M.S., Shukla, P.K. “Energy Efficient Gravitational Search Algorithm and Fuzzy Based Clustering With Hop Count Based Routing For Wireless Sensor Network” . *Multimed Tools Appl* 78, 27849–27870 (2019).** [**https://doi.org/10.1007/s11042-019-07844-2**](about:blank)**... Impact Factor 2.101... Q-2..**
17. Stalin, S., Maheshwary, **P., Shukla, P.K. *et al.* “Fast and Secure Medical Image Encryption Based on Non Linear 4D Logistic Map and DNA Sequences (NL4DLM\_DNA).”***Journal of Medical Systems, Springer, Vol.* 43, 267 (2019). [https://doi.org/10.1007/s10916-019-1389-z](about:blank)....... **Impact Factor 3.058.,, Q-1**
18. Vandana Roy, Shailja Shukla, Piyush Kumar Shukla, Paresh Rawat,“**Gaussian Elimination-Based Novel Canonical Correlation Analysis Method for EEG Motion Artifact Removal**”, Journal of Healthcare Engineering, Special Issue onAdvancements of Image Processing and Vision in Healthcare, Hindawi Publication,08 October 2017, [**https://doi.org/10.1155/2017/9674712**](about:blank),…..**Impact Factor 1.259….** Q-2.
19. Khare, A.; Shukla, P.K.; Rizvi, M.A.; Stalin, S. **“An Intelligent and Fast Chaotic Encryption Using Digital Logic Circuits for Ad-Hoc and Ubiquitous Computing”**. Entropy 2016, 18, 201, [https://doi.org/10.3390/e18050201](about:blank)**……….. Impact Factor 2. 494.** Q-2.
20. **Shukla, P.K.;** Khare, A.; Rizvi, M.A.; Stalin, S.; Kumar, S**. “Applied Cryptography Using Chaos Function for Fast Digital Logic-Based Systems in Ubiquitous Computing.”**  Entropy, 18 March 2015, 17, 1387-1410,  [https://doi.org/10.3390/e17031387](about:blank)**,..Impact Factor 2.494.,,, Q-2.**
21. Piyush Kumar Shukla, Sachin Goya, Rajesh Wadhvani, M. A. Rizvi, Poonam Sharma, and Neeraj Tantubay, **“Finding Robust Assailant Using Optimization Functions (FiRAO-PG) in Wireless Sensor Network,”** Special Issue on Classical and Hybrid Optimization Approaches and Their Applications in Engineering and Economics, Mathematical Problems in Engineering, Hindawi, Volume 2015 |Article ID 594345 | 7 pages, **https://doi.org/10.1155/2015/594345**....01 June 2015.. Impact Factor 1. 179.,,. Q-2.

**International Patent Granted**

1. Title: **“Design of Hexagonal Sahped Hybrid Fractal Quad Band Antenna for Wirless Application”** , **Patent Number: 2020103463** , Invneters: Rakesh Singhai, Jyoti Singhai, P.P. Singhal, Binod Kumar Soni, **Piyush Kumar Shukla**, Grant Dtae: 13 Jnaury 2021, **Valid for Eight years (upto 15 Novmeber 2028) from 16 Novmber 2020.**
2. Title: **“Machine Learning-based Plant Growth Moderator,”** Mallick, Pradeep Kumar; Bhoi, Akash; Priyadarshi, Neeraj; Samarjeet, Borah; Bhoi, Priya Brata; Mishra, Sushruta; Hrudaya Kumar, Tripathy; **Shukla, Piyush Kumar**; Sharma, Amarjeet Kumar; Shaik, Mahaboob, and MOHAMMED, ARSHAD, **Term of Patent Grant: Eight years (upto 18th December 2028) from 19 December 2020, granted the above patent on 20 January 2021, Patent Number: 2020103563.**

**National Patent Published**

1. Title: **“A NOVEL METHOD OF POWER REDUCTION IN MODIFIED AES USING BIT ENCRYPTION AND DECRYPTION TRANSITION SCHEME ON FPGA”,** Application No.202141006425 A, Publication Date**: 19/02/2021.**
2. **Title: “PCB Mount RCA Connector”,** Dr Anand Nayyar, Dr. Rudra Rameshwar, Dr. Rajani Kumari, **Dr. Piyush Kumar Shukla** and Dr. Rachna Jain, Application No.: 336648-001, Publication Date: 2212/2020.
3. **Title: "Diode Bridge",** Application Number: 336950-001, Publication Date: 29/12/2020, 1. Dr. Anand Nayyar 2. Dr. Rudra Rameshwar 3**. Dr. Piyush Kumar Shukla** 4. Dr. Rajalakshmi Krishnamurthi 5. Dr. Pradeep Tomar.
4. **Dr. Piyush Kumar Shukla et.al., “Noiseless Horn to Support the Concept of Smart Vehicle & Driverless Car in Smart City for Healthy Human Life, Indian Patents Application”** Patent Application No**.: 201821009846,** Office of the Controller General of Patents, Design and Trademark, Department for Promotion of Industry and Internal Trade, Ministry of Commerce and Industry, Government of India, Indian Patent Published in official Journal of Patent office, Publication Date: 23 March 2018.
5. **Dr. Piyush Kumar Shukla et.al, “Method for Design of Current Differenccing Buffered Amplifire Using Computing Device,” Indian Patents Application”** Patent Application No**.: 201911023802,** Office of the Controller General of Patents, Design and Trademark, Department for Promotion of Industry and Internal Trade, Ministry of Commerce and Industry, Government of India, Indian Patent Published in official Journal of Patent office, Publication Date: 15 June 2019.
6. **Dr. Piyush Kumar Shukla et.al, “Method for Fuzzy Inference Model Control for an Injection Modeling Machine,” Indian Patents Application”** Patent Application No**.: 201911023848,** Office of the Controller General of Patents, Design and Trademark, Department for Promotion of Industry and Internal Trade, Ministry of Commerce and Industry, Government of India, Indian Patent Published in official Journal of Patent office, Publication Date: 17 June 2019.
7. **Dr. Piyush Kumar Shukla et.al, “Neural Network based Optimization Method for Injection Modeling Manufacturing,” Indian Patents Application”** Patent Application No**.: 201941024047,** Office of the Controller General of Patents, Design and Trademark, Department for Promotion of Industry and Internal Trade, Ministry of Commerce and Industry, Government of India, Indian Patent Published in official Journal of Patent office, Publication Date: 18 June 2019.
8. **Dr. Piyush Kumar Shukla et.al, “Fuzzy Neural Network based PID Controller System and Method for Industrial Process Control,” Indian Patents Application”** Patent Application No**.: 201941024479,** Office of the Controller General of Patents, Design and Trademark, Department for Promotion of Industry and Internal Trade, Ministry of Commerce and Industry, Government of India, Indian Patent Published in official Journal of Patent office, Publication Date: 20 June 2019.
9. **Dr. Piyush Kumar Shukla et.al, “ Method for Detection of Restoration of Crack Digital Images,” Indian Patents Application”** Patent Application No**.: 201921025348,** Office of the Controller General of Patents, Design and Trademark, Department for Promotion of Industry and Internal Trade, Ministry of Commerce and Industry, Government of India, Indian Patent Published in official Journal of Patent office, Publication Date: 19 June 2019.
10. **Dr. Piyush Kumar Shukla et.al, “**Method Of Statistical Data Based Smart Reservation & Charging Of Parking**”** Patent Application No**.:** 201921026715**,** Office of the Controller General of Patents, Design and Trademark, Department for Promotion of Industry and Internal Trade, Ministry of Commerce and Industry, Government of India, Indian Patent Published in official Journal of Patent office, Publication Date: 16 August 2019.
11. **Dr. Piyush Kumar Shukla et.al, “**System Of Computerized Articles Sorting Based On Color, Shape, Odor And Weight**”** Patent Application No**.:** 201941027667**,** Office of the Controller General of Patents, Design and Trademark, Department for Promotion of Industry and Internal Trade, Ministry of Commerce and Industry, Government of India, Indian Patent Published in official Journal of Patent office, Publication Date: 12 July 2019.
12. **Dr. Piyush Kumar Shukla et.al, “**System Of Heat Sink Motor Control For Consumer Electronic Devices**”** Patent Application No**.:** 201941027667**,** Office of the Controller General of Patents, Design and Trademark, Department for Promotion of Industry and Internal Trade, Ministry of Commerce and Industry, Government of India, Indian Patent Published in official Journal of Patent office, Publication Date: 09 August 2019.
13. **Dr. Piyush Kumar Shukla et.al, “**System Of Smart Grid Network For Electricity Supply In Smart Cities Using Big Data Computing**”** Patent Application No**.:** 201911031482**,** Office of the Controller General of Patents, Design and Trademark, Department for Promotion of Industry and Internal Trade, Ministry of Commerce and Industry, Government of India, Indian Patent Published in official Journal of Patent office, Publication Date: 09 August 2019.
14. **Dr. Piyush Kumar Shukla et.al, “**Method Of Management Of Computing Workload In The Networked Hosts Using Artificial Neural Network**”** Patent Application No**.:** 201941032093**,** Office of the Controller General of Patents, Design and Trademark, Department for Promotion of Industry and Internal Trade, Ministry of Commerce and Industry, Government of India, Indian Patent Published in official Journal of Patent office, Publication Date: 09 August 2019.
15. **Dr. Piyush Kumar Shukla et.al, “**System Of Fuzzy Controller For Real-Time Adjustment Of Visual Sensor**”,** Patent Application No**.:** 201931033309**,** Office of the Controller General of Patents, Design and Trademark, Department for Promotion of Industry and Internal Trade, Ministry of Commerce and Industry, Government of India, Indian Patent Published in official Journal of Patent office, Publication Date: 13 September 2019.
16. **Dr. Piyush Kumar Shukla et.al, “**System Of Computerized Dynamic Control Of Small Vehicle**”,** Patent Application No**.:** 201911034211**,** Office of the Controller General of Patents, Design and Trademark, Department for Promotion of Industry and Internal Trade, Ministry of Commerce and Industry, Government of India, Indian Patent Published in official Journal of Patent office, Publication Date: 06 September 2019.
17. **Dr. Piyush Kumar Shukla et.al, “**Method For Management Of Scholarship Of Large Number Of Students Based On Block chain**”,** Patent Application No**.:** 201911034937**,** Office of the Controller General of Patents, Design and Trademark, Department for Promotion of Industry and Internal Trade, Ministry of Commerce and Industry, Government of India, Indian Patent Published in official Journal of Patent office, Publication Date: 06 September 2019.
18. **Dr. Piyush Kumar Shukla et.al, “**Machine Learning Based Computer Implemented Method For Managing Production From A Hydrocarbon Reservoir**”,** Patent Application No**.:** 201941040224**,** Office of the Controller General of Patents, Design and Trademark, Department for Promotion of Industry and Internal Trade, Ministry of Commerce and Industry, Government of India, Indian Patent Published in official Journal of Patent office, Publication Date: 25 October 2019.
19. **Dr. Piyush Kumar Shukla et.al, “**System Of Personalized Physical And Mental Health Monitoring With Using IOT Sensors Network"**”,** Patent Application No**.:** 201911041380**,** Office of the Controller General of Patents, Design and Trademark, Department for Promotion of Industry and Internal Trade, Ministry of Commerce and Industry, Government of India, Indian Patent Published in official Journal of Patent office, Publication Date: 18 October 2019.
20. **Dr. Piyush Kumar Shukla et.al, “**Computer Implemented Method For Semantic Indexing Based Text Classification Using Deep Learning**”,** Patent Application No**.:** 201911042141**,** Office of the Controller General of Patents, Design and Trademark, Department for Promotion of Industry and Internal Trade, Ministry of Commerce and Industry, Government of India, Indian Patent Published in official Journal of Patent office, Publication Date: 25 October 2019.
21. **Dr. Piyush Kumar Shukla et.al, “**Neural Network Based Method For Unorganized Datasets Pattern Recognition In Large Data**”,** Patent Application No**.:** 201911043337**,** Office of the Controller General of Patents, Design and Trademark, Department for Promotion of Industry and Internal Trade, Ministry of Commerce and Industry, Government of India, Indian Patent Published in official Journal of Patent office, Publication Date: 25 October 2019.
22. **Dr. Piyush Kumar Shukla et.al, “**Method Of Real Time Strategy Adaptation In Video Games Using Artificial Intelligence**”,** Patent Application No**.:** 201911044007**,** Office of the Controller General of Patents, Design and Trademark, Department for Promotion of Industry and Internal Trade, Ministry of Commerce and Industry, Government of India, Indian Patent Published in official Journal of Patent office, Publication Date: 08 November 2019.
23. **Dr. Piyush Kumar Shukla et.al, “**Method Of Load Distribution Balancing In Fog Cloud Computing Architecture Using Data Flow Acceleration**”,** Patent Application No**.:** 201911045687**,** Office of the Controller General of Patents, Design and Trademark, Department for Promotion of Industry and Internal Trade, Ministry of Commerce and Industry, Government of India, Indian Patent Published in official Journal of Patent office, Publication Date: 15 November 2019.
24. **Dr. Piyush Kumar Shukla et.al, “**System Of Smart Helmet For Monitoring Health Of A Two-Wheeler Rider And Occurrence Of Collision**”,** Patent Application No**.:** 201921049666**,** Office of the Controller General of Patents, Design and Trademark, Department for Promotion of Industry and Internal Trade, Ministry of Commerce and Industry, Government of India, Indian Patent Published in official Journal of Patent office, Publication Date: 20 December 2019.
25. **Dr. Piyush Kumar Shukla et.al, “**Multi-Objective Optimization System And Method For Node Capture Attack In A Wireless Sensor Network (WSN)**”,** Patent Application Patent Application No **:** 201921050646**,** Office of the Controller General of Patents, Design and Trademark, Department for Promotion of Industry and Internal Trade, Ministry of Commerce and Industry, Government of India, Indian Patent Published in official Journal of Patent office, Publication Date: 10 January 2020
26. **Dr. Piyush Kumar Shukla et.al, “**A Smart Suite For Assisting The Pregnant Women,”Patent Application **No.:** 202041008057**,** Office of the Controller General of Patents, Design and Trademark, Department for Promotion of Industry and Internal Trade, Ministry of Commerce and Industry, Government of India, Indian Patent Published in official Journal of Patent office, Publication Date: 06 March 2020.
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7. Dr. Sanjay Silakari, Praveen Lalwani, **Piyush Kumar Shukla**, **“Optimized On Demand Distance Vector Routing,**” ISCOS, IEEE Conference, NIT Suratkal, 16-19 Dec 2012, pp. 31-35.
8. **Piyush Kumar Shukla**, Sanjay Silakari, Nidhi Newalkar, **“Comparative Analysis of Co-operative MAC Schemes,**" ISCOS, IEEE Conference, NIT Suratkal, 16-19 Dec 2012, pp. 42-48.
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10. **Piyush Kumar Shukla**, Sanjay Silakari, Nidhi Newalkar, **“Various Cooperation Strategies at Media Layer in an Ad-Hoc Network**." ICEES (International Conference on Electrical, Electronics and Computer Science) pp. 9-14, Nagpur, 8 July 2012.
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13. **Piyush Kumar Shukla**, Sarita Singh Bhadauria, Sanjay Silakari, **"A Survey for Designing Attack Resilient and Adaptive Medium Access Control Protocol for Wireless Networks**," Computational Intelligence, Communication Systems and Networks, International Conference on, pp. 178-183, 2009 First International IEEE Conference on Computational Intelligence, Communication Systems and Networks, 2009. Indore, India, July 23-25, ISBN: 978-0-7695-3743-6.
14. **Piyush Kumar Shukla**, Sarita Singh Bhadauria, Sanjay Silakari, **“Network Security Scheme for Wireless Sensor Networks using Efficient CSMA MAC Layer Protocol**," ITNG 2009: IEEE Conference pp. 1579-1580.
15. **Piyush Kumar Shukla**, Silakari, “**An Ethical Way of Encrypt Data Transfer in Bluetooth Mobile Using Chaos Based Feedback Technique,”** 6th International Conference for New Generation (ITNG), IEEE Conference, 2009, pp. 1583-1584.
16. **Piyush Shukla**, Pradeep Rusia, L. Chablani, B.S Raghuvanshi, **"Multiple Subgroup Data Compression Techniques based on Huffman Coding,”** Computational Intelligence, Communication Systems and Networks, International Conference on, pp. 178-183, 2009 First International IEEE Conference on Computational Intelligence, Communication Systems and Networks, 2009. Indore, India, July 23-25, pp. 397-402, ISBN: 978-0-7695-3743-6.
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19. **Piyush Kumar Shukla**, Sarita Singh Bhadauria, Sanjay Silakari, **“Multi-User FPGA An Efficient Way of Managing Expensive FPGA Resources Using TCP/IP, Wi-Max/ Wi-Fi in a Secure Network Environment**” ITNG 2008. Fifth International Conference on 7-9 April 2008, pp. 609 – 614, Las Vegas, USA, IEEE Computer Society.
20. **Piyush Shukla**, Sushi Kumar, Rajesh Kumar Deharia,“ **Switching Code Data Compression Technique using an Adaptive Huffman Coding,”** Recent Advances On Applied Mathematics, Proceedings of American Conference, MATHS ’08 Cambridge, Massachusetts, USA, March 24-26, 2008, pp. 431-435.
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Ph.D. Supervision: Awarded

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| **S.No.** | **Name** | **Title of Thesis** | **Date of Registration** | **Status** | **University** | **Role** |
| 1 | **Dr. Shraddha Pandit** | **Study and Analysis of Video Compression with Special Reference to Fractal Video** | Year 2011 | Awarded October 2019 | RGPV, Bhopal | Supervisor |
| 2 | **Dr. Anoop Chaturvedi** | **“Non Separable Reversible Data Hiding using Inverse S-Order and Skew Tent Map”** | Year 2011 | **(Awarded) June 2019** | RGPV, Bhopal | Supervisor |
| 3 | **Ms. Preeti Tiwari** | **“Machine Learning Approaches for Special Geographical Data”** | Year 2011 | **(Submitted 2019)** | RGPV, Bhopal | Supervisor |
| 4 | **Mr. Manish Ahirwar** | **“An Optimization Algorithm for Large data sets using Internet of Things”** | Yera 2015 | **(Under Submission)** | RGPV, Bhopal | Supervisor |
| 5 | **Dr. Rajendra Gupta** | **“An Analytical and Practical Approach to Countermeasure the Phishing Attack: A Framework Design for Anti-Phishing Tool”** | 03-11-2012 | **(Awarded) 2017** | AISECT, Bhopal | Supervisor |
| 6 | **Dr. Kiran Patidar** | **Reliable and QoS Aware Mobile Social Cloud Computing for Efficient Service Delivery** | Year 2013 | **Awarded April 2018** | AISECT, Bhopal | Co- Supervisor |
| 7 | **Mr. Ankur Pandey** | **A Self Adaptive And Improved Quality Of Service (Qos) Based Flying Ad-Hoc Network (Fanet) For Disaster Response Operation.s** | Year 2013 | **(Submitted December 2020)** | RGPV, Bhopal | Supervisor |
| 8 | **Ms. Deepika Jain** | **Development Of Comprehensive Optimization Strategy For Wireless Sensor Networks**  **Using Meta-Heuristic Approaches** | Year 2014 | **RDC Completed in 2018** | RGPV, Bhopal | Supervisor |
| 9 | **Mr. Anand Motwani** | **Cloud Powered Intelligent Framework for Smart Healthcare Monitoring** | Year 2014 | **RDC Completed in 2018** | RGPV, Bhopal | Supervisor |
| 10 | **Mr. Manish Agrawal** | **Effective Technical Indicators based Stock Indices Price Prediction using Deep Learning Networks** | Year 2011 | **(Submitted 2021) & Under Review** | RGPV, Bhopal | Supervisor |
| 11 | **Mr Ramanand Singh** | **Design & Analysis of an Efficient Watermarking Technique using Double Density Discrete Wavelet Transform** | **2015** | **Awarded, 20 August, 2020** | Rabindranath Tagore University, Bhopal. | Supervisor |
| 12 | **Naziya Hussain** |  | **2015** | **Awarded. 21 August, 2020** | Rabindranath Tagore University, Bhopal. | Co-Supervisor |
| 13 | **Shubha Mishra** |  | **2018** | **RDC Completed in September 2019** | RGPV, Bhopal | Supervisor |
| 14 | **Chanchal Lohi** |  |  | **RDC Completed in September 2019** | RGPV, Bhopal | Supervisor |
| 15 | **Sweta Gupta** |  |  | **RDC Completed in September 2019** | RGPV, Bhopal | Supervisor |
| 16 | **Shruti Shrivastava** |  |  | **RDC Completed in September 2019** | RGPV, Bhopal | Co-Supervisor |
| 17 | **Priyanka Pateriya** |  |  | **RDC Completed** | RGPV, Bhopal | Supervisor |
| 18 | **Manish Gupta** |  |  | **RDC Completed in September 2019** | RGPV, Bhopal | Supervisor |
| 19 | **Vijay Trivedi** |  |  | **RDC Completed in November 2020** | RGPV, Bhopal | Supervisor |
| 20 | **Ankur Khare** |  |  | **RDC Completed in September 2019** | Rabindranath Tagore University, Bhopal. | Co-Supervisor |

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| **Editorial Member in International Journals**   1. Editorial Member of IEEE Digital Library, ACM digital library, ISTE (LIFE MEMBER), IACSIT, IAENG.. 2. Editorial Board Member, “ International Journal of Master of Engineering Research and Technology, ISSN (Online): 2394-6172 (International Journal).  Editorial Board Member, “Journal of  Computer & Information Technology,ISSN: 2455-9997 Online(International Journal).Editorial Board Member, “International Journal of Engineering and Innovative Technology (IJEIT) ISSN: ISSN:2277-3754.(International Journal).  1. Advisory Board Member of the 3rd National Conference In Recent Advancement In Developing India Organized By Sam College Of Engineering Bhopal. |

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| **Administrative Activities**   1. 06/12/2017 – Participated in vice-chancellor meet held at RGPV 2. 16/01/2018 - Member of physical verification committee of STORE SECTION, RGPV 3. 27/01/2017 – Monitoring of classrooms, labs and respective syllabus 4. 01/03/2017 – Physical inspection of computers in CSE Lab 5. 28/03/2017 – Supporting staff in annual stock verification of workshop for year 2016-2017 6. 30/07/2016 – Member of anti-raging committee/group RGPV 7. 23/08/2016 – Release of new printer cartridge from central Store section, RGPV 8. 12/01/2017 – Expansion of university syllabus as per AICTE norms 9. 23/01/2017 – Postponing registration date for AICTE Smart India Hackathon 2017 10. 17/01/2017 – Branch Transfer for college students affiliated from RGPV 11. 01/02/2017 – Joined as DDIPG-CSE co-coordinator 12. 16/01/2017 – Joined as Assistant Registrar, RGPV 13. 02/11/2017 – Joined as Officer-in-Charge RGPV 14. 27/11/2017 – Joined as committee member to initiate the process of NBA accreditation 15. 06/12/2017 – Assigned with task for ACN answer sheet evaluation for DDIPG-CSE 16. 15/05/2017 – Joined as central observer at SIRT, Bhopal 17. 09/05/2017 – Appointment for practical exams by Maakhanlal Chaturvedi National University of Journalism and Communication 18. 18/01/2018 – Joined as Joint Secretary of RGPV SAS 19. 16/02/2018 – Member of committee for Chancellor Scholarship 2018 20. 30/11/2017 – Appointed member of committee for Vice Chancellor Meet 2017 21. 7/03/2017 – Committee member for College Bus and Vehicle, RGPV 22. 05/05/2014 – Promoted under career advancement scheme for Stage-2 i.e, for upward movement of AGP from 6000/- to 7000/- 23. 23/11/2017 – Preparation for NBA Accreditation 24. April -May 2018 – Appointed as paper setter for B.Sc/B.com IV Sem |

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| **REFERENCES** | |
| Dr. RAJIV PANDEY, ASSISTANT PROFESSOR,DEPARTMENT OF COMPUTER SCIENCE &ENGINEERING, UIT, RGPV, BHOPAL, MADHYA PRADESH, INDIA. | Dr. RATISH AGRAWAL ASSISTANT  PROFESSOR, DEPARTMENT OF INFORMATION TECHNOLOGY , UIT, RGPV. BHOPAL, MADHYA PRADESH, INDIA. |

I hereby state that the statements made above are true to the best of my knowledge, proof of these all information I will present when required.

**Dr. PIYUSH KUMAR SHUKLA**

Date: 14/04/2020

Place: Bhopal