# PROF. DR. MILIND PANDE

### Pro-Vice Chancellor | Educationist | Researcher

<u>Post-Doctoral Research Fellow -Technology Transfer,</u> <u>M.E., Ph. D.(Engg.), M.PM., MBA, Ph.D.(Management)</u>



www.milindpande.com

www.linkedin.com/in/drmilindpande

### PROFILE

Prof. Dr. Milind Pande is a charismatic leader with a penchant for heralding the Indian Higher Education sector to new heights. He has relentlessly worked on actualizing the dream of former President of India Dr A.P.J. Abdul Kalam towards "Providing Urban Amenities to Rural Areas (PUARA)." Dr. Pande is also a rare recipient of a coveted Post-Doctoral Fellowship in Technology Transfer, from the Ministry of HRD, Govt. of India. An erudite researcher, he has over 70 research publications, 11 internationally granted patents, 20+ foreign visits and numerous academic accolades to his credit. With luminary academic credentials, numerous professional laurels and an illustrious career spanning over 30 years, Dr. Milind Pande envisions creating an epoch-making difference in the Indian Higher Education landscape through his work and ardently believes in the notion of Innovative Technology + Indian Talent = India Tomorrow.

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### Kothrud, Pune, 411038

### EXPERTISE

New Education Policy (NEP) Implementation

### Strategist

- NAAC, NBA Assessor & Chairman
- Academic Administrator
- Research & Innovation
- Technology Management
- Start-ups & Accelerators
- International University Tie-ups
- Industry-Academia Collaboration
- Skill Development Programmes

### EXPERIENCE

### MIT Group of Institutions - 22 Years

### **Pro-Vice Chancellor - MIT WPU**

Dr. Vishwanath Karad MIT World Peace University, Pune, India August 2019 - Present

### Dean - Research & Development - MIT WPU

Dr. Vishwanath Karad MIT World Peace University, Pune, India July 2018 - July 2019

### **Director - MIT SOT**

MIT School of Telecom Management, Pune, India. (Ranked 47th in NIRF, MHRD, Govt. of India) August 2008 - July 2018

### **Professor, MBA - MIT PUNE**

Maharashtra Institute of Technology, Pune, India August 2007 - July 2008

Assistant Professor, Electronics & Telecom. - MIT PUNE Maharashtra Institute of Technology, Pune, India August 2003 - July 2007

## Senior Lecturer, Electronics & Telecommunication, and Training & Placement Officer

Shri Sant Gajanan Maharaj College of Engineering (SSGMCE), Shegaon, India August 1996 - July 2003

### EDUCATION

Post Doctorate Research Fellowship (ICSSR), Ministry of HRD, Govt. of India, New Delhi

- Rotary International "Peace Fellowship", USA
- Ph. D. in Business Management (International Trade)
- Ph. D. in Engineering (Electronics & Telecommunication)
- Executive Program, IIM Ahmedabad
- Executive Program, ISB Hyderabad
- M.B.A. (Marketing Management), M.P.M.(Industrial Relations)
- M.E.(Power Electronics Engineering)
- BE (Electronics Engineering)

### PATENTS

Awarded 7 International Patents & 4 Indian Design Patents as follows:

- International Innovation Patent Number: FA/08627/mum/2023: "An Intelligent Interactive System for Analyzing Online News Articles."
- International Innovation Patent Number: 2021106275: "A Zone Specific Weather Monitoring System."
- International Innovation Patent Number: 2021106258: "A System for managing and automating activates pertaining to human resource Management."
- International Innovation Patent Number: FA/08392/mum/2022: System and Method for Generating and Displaying Personalized Television Content
- International Innovation Patent Number: FA/08359/mum/2022: System and Method to Detect Twitter Spam Using an Intelligent Hybrid Classifier Approach
- International Innovation Patent Number: FA/08313/mum/2022: System and Method to Develop a Human-Computer Interaction Based User Interface for Facilitating Musical Instrument Rentals.
- International Innovation Patent Number: FA/08302/mum/2022 System and Method to Intelligently Display or Suspend Social Media Notifications using Explainable Artificial Intelligence (AI)Human-Computer Interaction (HCI).
- Indian Patent Number: 81/MUM/2014\*: "H2E2: Wireless Sensor Network (WSN) Green Platform for Precision Agriculture".
- Indian Design Patent Number: 349966-001: "EEG (Electro Encephalo Graphy) integrated XR (Extended Reality)"
- Indian Design Patent Number:350362-001: "Arm Massager using Compressed Air (SET)"
- Indian Design Patent Number:350363-001:" Leg Massager Using Compressed Air (SET)"

### **RESEARCH SUPERVISION**

- 20 Ph.D. Research Scholars have been awarded doctorates in Management and Engineering.
- <u>Research Areas of Expertise:</u>
- Technology Management, International Trade, Artificial intelligence, Human-Computer Interaction, Internet of Things(IoT), Wireless Sensor Networks, ICT Innovations, M-Agriculture, M-Health,
- <u>Ph. D. Guide / Supervisor :</u> Savitribai Phule, Pune University, (SPPU) Pune, MIT World Peace University, (WPU) Pune, Rashtrasant Tukdoji Maharaj Nagpur University, (RTMNU) Nagpur, Tilak Maharashtra Vidyapeeth, (TMV), Pune, Dr. D. Y. Patil University, (DPU) Pune, MIT Art Design Technology University, (MIT-ADTU) Pune

### RESEARCH GRANTS AWARDED

- Research Project "Impact of ICT facilities on Rural Education in Backward Regions" (A study in the context of BPL families in Marathwada and Vidarbha regions of Maharashtra State) got a sanction of Rs. 10 Lacs from (ICSSR), Ministry of HRD, Covt. of India,
- Research Project "Regional Study of Telecom Technology Options for Indian Rural Education" got a sanction of Rs. 20 Lacs from (ICSSR), Ministry of HRD, Govt. of India, New Delhi.

### **R&D PROJECTS COMPLETED**

- M-Agri System: A mobile-based application which helps farmers to get information about crops, soil conditions, and weather conditions, where data is stored, updated, and broadcasted at regular intervals. Through Hybrid Hexagonal Energy Efficient (H2E2) Wireless Sensor Network (WSN) platform precision agriculture by covering maximum area in minimum sensors, increased energy efficiency, network lifetime and reduced cost is possible.
- QuickTag: An improved AI-HCI-based Optical Character Recognition System for improving the travel time of vehicles from toll booths
- InstruRent: Online musical instrument rental systems based on AR-VR and AI-based recommendations.
- IntelliPay: Intelligent Payments Alerts Interface Based on Bayesian Parametric Estimation and an intuitive HCI-based UI-UX for facilitating smart payments.
- Zone-Specific Weather Monitoring System: Based on IOT, AI and Embedded Systems for tracking local weather changes in a city.
- **Mobi Tech:** It is a mobile education technology which helps to educate rural masses through Mobile Internet Devices (MID). Pre-configured MID has classroom sessions for class 5th and 10th-standard students where a child can learn on his own.
- Mobile Attendance: Mobile Based attendance system developed on the Android platform using WiFi or cellular network on campus to mark attendance and this intelligent system authenticates the student in the provided classrooms or seminar halls.
- Mobile Health: An application named EasyPatho working on the Android platform takes microscopic images of blood as an input and provides reports as an output and these reports that can be easily sent to doctors and patients anywhere in the world.
- Highway Traffic Management System (HTMS) It deals with crucial issues like speed control, accidents and emergency support on the highways and this will be effectively used for monitoring weather, incident detection, video surveillance, classification of vehicle sizes and count using IR-based non-intrusive sensors. Evaluation of the impact on national prosperity of this work and economic gains and other benefits derived.

### STARTUPS

• Co-Founder & Managing Director, Human Inspired Al Research & Development Pvt. Ltd.

### **GLOBAL UNIVERSITIES INTERACTION**

- Innovation collaboration interaction with UT, Austin, Texas State University, Texas A&M, USA
- Start-up & accelerator collaboration meeting with Austin at US India Chamber of Commerce, Austin, USA.
- Visit and interaction with the Deans & Provost of University of Oxford, London.
- Interacted with Massachusetts Institute of Technology (MIT-USA), Brown University, RI, Providence, Harvard University, Northeastern University, Boston and the Wayne State University, Detroit, Michigan State University, USA.
- Visited Japan Tokyo for G20 Interfaith Conference, Goi Peace Foundation, and Soka Gakkai University, Japan.
- Interacted with British Parliament, London School of Economics & Political Science as well as Commonwealth Headquarters, UK.
- Visited UK for International University Tie-ups and interacted with Professors and Deans of the University of Dundee, University of Abertay Dundee, University of North Umbria, Coventry University, University of Bedfordshire, and University of Derby, UK.
- Interacted Indo-American Chamber of Commerce Detroit, Michigan State, for exploring international tie-ups, USA.
- Interacted Zayed University Dubai, and American University Dubai, for fostering International tie-ups, Dubai.
- Attended International Telecommunications Union (ITU) conference at Geneva, Switzerland to Exchange ideas for Collaboration, Switzerland.
- Visited USA for interacting with Professors and Deans of Kellogg School of Management, University of Illinois, Chicago, USA, Benedictine University, Chicago, USA and Illinois Institute of Technology, Chicago, USA.
- Visited Singapore for Interactions with Faculties, Dean, and the Departmental Heads of the National University of Singapore (NUS) and INSEAD Singapore.
- Visited Singapore for 'CommunicAsia 2011' and interacted with Professors and Deans of National University of Singapore, and Nanyang Technological University, (NTU), Singapore and Singapore Management University, (SMU), Singapore.
- Represented India at International ROBOCON in Cairo, Egypt and took the Delegation of National Robocon, Egypt.
- Visited NATO Headquarters, Brussels, Belgium, Europe.
- Visited UNESCO Headquarter in Paris.
- Visited Switzerland Geneva, WTO, OHCHR, ICRC, UNO, and UNICEF.
- Visited Hague University, Netherlands & the International Court of Justice also visited Indian Chambers of Commerce and Trade talk, Netherlands.

### AWARDS AND HONOURS

- Received Industrial Research Scientist Award, from the prestigious Audyogik Samshodhan Vikas Kendra (VASVIK) in the category of Information and Communication Technology (2021). A cash honorarium of 1,51,000/- was awarded along with the citation & the award, Mumbai.
- Received Honorable Dr. APJ Abdul Kalam Gold
   Medal Award
- Received 'Cyber Crime Helpline Award 2016" for calibre & Commitment from 'Cyber Crime Helpline', Pune, India.
- Awarded for 'Recognizing Excellence in Education' in Concern 2012 -by ASSOCHAM and Bal Bharti Academy, New Delhi India, Awarded MIT School of Telecom Management, Pune for its contribution towards the 'Education Development in Rural India of the Year 2011-2012.
- Received the Best "Business School Leadership Award" from the Prestigious 19th Dewang Mehta Business School Awards, 2011 in recognition of leadership, development, innovation & rural projects undertaken in the field of telecommunication business
- Awarded "Accredited Management Teacher" (AMT), in the area of 'Management of Technology and Innovation', by All India Management Association (AIMA) in the Silver Jubilee Year of AIMA, New Delhi.
- Received an Award "Ideal Teacher" at the auspicious hands of Hon'ble Minister for Finance and Planning, Govt. of Maharashtra.
- Received an Award "Jewel in the Crown of MIT" at the auspicious hands of Hon'ble Minister for Home Affairs, Govt. of India, in the augustus presence of Hon'ble Padma Bhushan Dr. Vijay P. Bhatkar, Father of Supercomputers, Former Executive Director of CDAC.

### **BLOGS & BOOKS AUTHORED**

- 100+ YouTube videos, 21+ Blog posts :https://www.youtube.com/@edutalkswithprof.mili ndpande
- 50+ newspaper articles, 100+ media coverages, addressed 40+ press conferences, delivered 150+ expert talks in MDP's, FDP's & webinars :https://linktr.ee/Dr.Milindpande
- Delivered 20+ talk on NEP Implementation all over Bharat.
- Editor, Innovations and Dynamics in Photonics and Electronics in DSIR Funded - RTEP proceedings on photonics and electronics & economics management, Springer Nature 2024.
- Optimization Methods in Mobile Communication Systems Engineering Applications of Artificial Intelligence, Springer Nature, 2023, a Springer Publication, Germany

### **BLOGS & BOOKS AUTHORED**

- Application of Cohort Intelligence Algorithm for Numerical Integration Intelligent Systems and Application Selected Proceedings of ICISA 2022
- Wrote a book on Mobile Communications with a core focus on the Indian Telecom ecosystem in collaboration with Prof Rishi Kappal. The book, titled, Next Generation Mobile Communications-Mobile, Infra Technology, Management, Data' is published by McGraw Hill Education.
- Wrote a book chapter entitled 'Application of Cohort Intelligence Algorithm for Numerical Integration' published in Intelligent Systems and Application Select Proceedings of ICISA 2022, a Springer Publication, Germany
- Wrote a book on "Cohort Intelligence-Based Multi-Objective Optimizer", The Book Published by Springer Nature 2024, Handbook of Formal Optimization
- Wrote a book on Solution of Goal Programming Product Mix Problem with Cohort Intelligence Algorithm, The Book Published by Intelligent Systems for Smart Cities Proceedings of ICISA 2024
- Wrote a book on Editor, Innovations and Dynamics in Photonics and Electronics, The Book Published by DSIR Funded - RTEP proceedings on photonics and electronics & economics management, Springer Nature 2024.

### MEMBERSHIP OF PROFESSIONAL BODIES

- IEEE, Life Member (IEEE Member No.: 19845321)
- Association for Computer Machinery (ACM), Life Member (ACM Member No.: 1445216)
- Computer Society of India (CSI), Life Member (CSI Member No.: 1345717)
- Life Member, MAEER Trust, Pune, India (Founding Body of MIT Groups of Institutions and Universities, Pune).
- Member, Board of Management, MIT World Peace University, Pune, India
- Former Member, Academic Council, MIT Art Design Technology University, Rajbaug, Pune.
- Member, Academic Council, Board of Management, MIT World Peace University Pune, India
- Former Member, Board of Management, Avantika University, Ujjain, MP, India
- Member, Organizing Committee, MAE, SPPU Pune
- University Advisory Committee BCUD, SPPU, Pune
  University
- Member, Editorial Board: NIT Graduate School of Management, Nagpur University, India
- Member, Advisory Board: Dr Bhausaheb Nandurkar College of Engineering and Technology, Yavatmal, Nagpur University, India.
- Member, Editorial Board International Journal of Advances in Computing and Information Research (IJACIR), SPPU Pune University, Pune.

### POSITIONS OF RESPONSIBILITY

- Member, UGC Expert Committee, Govt. of India, New Delhi.
- Member Assessor, National Assessment and Accreditation Council (NAAC) Committee, MHRD, Govt. of India, Bangalore.
- Joint Secretary General, Organizing Committee, World Parliament 2018 to 2024. (06 years).
- National Convener, G20 Interfaith Summit, Pune, India 2023.
- Chief Convenor of 1st National Scientist's Round Table Conference for Viksit Bharat 2047. (Mentored by Dr. Raghunath Mashelkar sir).
- Convener ABU ROBOCON India. 2005 -2013 (08 years)
- Member, Telecom Advisory Committee for Pune Telecom District, BSNL- by Ministry of IT and Telecom, Government of India for six years.
- Chief Convenor, Hack-MIT-WPU: The Annual Hackathon for 2022, 2023, 2024.
- Chief Innovation Convenor of NASA Hackathon in association of ISRO.
- Chief Convener, "Smart India Hackathon" MIT Group of Institutions, Pune, India 2018 to 2024. (06 years)
- Special Jury, Selection Committee for "Accenture Innovation Challenge Award", Bangalore, India.
- Delivered a 'Leadership Talk' on 'Automotive TELEMATICS: Trends in Automotive Telematics: The race to Safety - Insurance Telematics' at Telematics India, organized by Telecom Wire, Pune.
- Delivered a talk on National Telecom Policy 2011 and Opportunities for Global Investors in Manufacturing, R&D and Value-Added Services CommunicAsia 2012, Marina Bay Sands, Singapore.
- Participated as a Panelist at CommunicAsia, Singapore for Panel Discussion titled "Emerging Markets: Incredible India." Singapore
- Participating member of National education policy 2019 at NAAC Bangalore, India.
- National Convener, 90th Annual Conference of Indian Mathematical Society an International Meet 2024

- 70+ publications, 25 conferences proceedings
- 20 Scopus / WoS indexed journals, with h-index 7, vidwaan score 8
- Google Scholar: <u>https://scholar.google.com/citations?</u> <u>hl=en&user=aH--OncAAAAJ</u> i10 Index 6
- Automatic Block Removal and Anticlogging In Drainage Management System Using TSG-FCMC and AAL-RNN - September 2023 - Published Journal Springer Journal's Editorial Office Water Resources Management
- IoT-Based Real Time Drainage Monitoring System -January 2024 - Published Journal IEEE International Conference on Emerging Smart Computing and Informatics 2024.
- "Katti, A., Pande, M. Formation characteristics of dark solitons in photorefractive crystals having both linear and quadratic electro-optic effect simultaneously. Opt Quant Electron 55, 1132 (2023).
- Application of Cohort Intelligence Algorithm for Numerical Integration Intelligent Systems and Applications: Select Proceedings of ICISA 2022, August 2023.
- "Designing a human-centred AI-Based Cognitive Learning Model for Industry 4.0 Applications" ,Bentham Science Publishers, Singapore on Vol. No. E-190.
- A Comprehensive Study of Challenges in IoT for I 4.0" Vol. No. E-191. Paper Published at Bentham Science Publishers, Singapore on "Industry 4.0 Convergence with AI, IoT, Big Data and Cloud Computing
- Paper Published at iSCSi -International Conference On Industry Science and Computer Sciences Innovation at Vila Nova de Gaia, Porto, Portugal: "Comparative Analysis of Machine Learning Algorithms for Analyzing NASA Kepler Mission Data" Vol. No. 154.
- Paper Published at iSCSi International Conference On Industry Science and Computer Sciences Innovation at Vila Nova de Gaia, Porto, Portugal.
- "Data Analytics in the Game of Cricket: A Novel Paradigm" Vol. No. 153, 11th March 2022. Recognized with the "Certificate of Presentation" for Paper Published at iSCSi - International Conference On Industry Science and Computer Sciences Innovation at Vila Nova de Gaia, Porto, Portugal.
- "Comparative Analysis of Machine Learning Algorithms for Analyzing NASA Kepler Mission Data" Vol. No. 154

- Turkish Scopus Journal of Computer and Mathematics Education: "Study of Personnel concerns of MSME's in Pune, India" Vol.12 No.12 (2021).
- SARC: "A Study of Learning & Development, Team Work, Work Culture & Leadership as well as Demographic Characteristics of Employee on Engagement Level of Employees in Telecom Organization" at the International Conference in Business Management, Humanities and Social Science (ICBMHSS)
- Intelligent Twitter Spam Detection: A Hybrid Approach": Research paper published at Springer International Conference, London.
- Factors Influencing Employee Engagement & Different Types of Engaged Employees, IJRAR, Volume 6, Issue 2
- Factors Influencing Employee Engagement in Telecom Organizations © JETIR, Volume 6, Issue 6
- Impact of Search Engine Optimization Dimensions in B-School Brand Building: An Empirical Study from International Journal of Latest Technology in Engineering, Management & Applied Science (IJLTEMAS) Volume VII, Issue V.
- Published Research Paper on "An Automated Drainage Vision-based Monitoring System - ADVMS: Key Component in Developing Smart Cities in India, IEIE Transactions on Smart Processing and Computing, vol. 13, no. 3, June 2024
- Published Research Paper on "Sustainable Living -Ancient Indian Wisdom", INSPIRA-JCECS i.e. Journal of Commerce, Economics and Computer Science Published: Volume 10, ISS : 2395-7069 Date of Publication April 2024
- Published Research Paper on "IoT-Based Real Time Drainage Monitoring System", IEEE International Conference on Emerging Smart Computing and Informatics 2024. Date of Publication March 2024
- Published Research Paper on "Human-Centered Computing and Human-Centered Al" Published in an Elsevier Conference in Portugal, Date of Publication February 2024
- Published Research Paper on "Formation characteristics of dark solitons in photorefractive crystals having both linear and quadratic electrooptic effect simultaneously", Publisher: Springer : Optical and Quantum Electronics : Article number : 1132 (2023) Date of Publication January 2024