



Organized by Computer Department

Celebrating Silver Jubilee Year : 1999-2024

DOLAT-USHA INSTITUTE OF APPLIED SCIENCES AND DHIRU-SARLA INSTITUTE OF MANAGEMENT & COMMERCE, VALSAD

[Managed by : Shree Nootan Kelavani Mandal]

# INTERNATIONAL CONFERENCE

## 2025

“ADVANCING FUTURE TRANSFORMATION OF BUSINESS,  
INDUSTRY AND SOCIETY: THE SYNERGY OF AI, DATA,  
SEMICONDUCTORS AND EMERGING TECHNOLOGIES”

( AFTBIS - 2025 )

11TH & 12TH JANUARY 2025

REGISTRATION :



<https://forms.gle/yCixLs7cvcKY9u9K6>

CONTACT US

02632-244428

D-UIAS and D-SIM&C, Valsad

conference@dolatusha.ac.in

[www.dolatusha.ac.in/conference/computer](http://www.dolatusha.ac.in/conference/computer)



# *International Conference*

*Organized by*

*“Computer Department”*

*(Celebrating silver jubilee year: 1999-2024)*

*of*

*“Dolat-Usha Institute of Applied Sciences and  
Dhiru-Sarla Institute of Management & Commerce”*

*[Managed by : Shree Nootan Kelavani Mandal, Valsad]*

**Date of Conference : 11<sup>th</sup> & 12<sup>th</sup> January, 2025**

## ***"Advancing Future Transformation of Business, Industry and Society: The Synergy of AI, Data, Semiconductors, Cybersecurity and Emerging Technologies"***

### **About the Conference :**

The "Advancing Future Transformation of Business, Industry, and Society: The Synergy of AI, Data, Semiconductors, and Emerging Technologies" conference is a premier international-level event designed to bring together experts, innovators, and thought leaders from academia, industry, and government. The conference will focus on exploring cutting-edge advancements in Artificial Intelligence, Data Science, Data Analytics, Business Analytics, Business Intelligence, IoT, Semiconductors, Big Data, Cloud Computing, and Cyber Security. Through keynote sessions, panel discussions, and technical presentations, attendees will have the opportunity to engage in insightful dialogues about how these emerging technologies are transforming business processes, industrial applications, and societal systems. Participants will gain deep insights into the integration of AI with semiconductor technologies and the role of data-driven intelligence in shaping smart and sustainable solutions for the future. This conference is a unique platform for fostering collaboration, sharing knowledge, and addressing the key challenges and opportunities in the rapidly evolving landscape of digital transformation and technological innovation.

### **Scope of the Conference :**

The conference will provide a multidisciplinary platform to explore the intersection of Artificial Intelligence, Data Science, Data Intelligence, Data Analytics, Business Intelligence, Business Analytics, Semiconductors, and Emerging Technologies. It aims to bring together researchers, industry professionals, and thought leaders to discuss recent advancements and their practical applications in various domains, including business transformation, industry automation, and societal impact. Participants will explore the role of AI and data analytics in optimizing decision-making processes, while examining how semiconductors power these technologies, enabling smarter devices and IoT applications. The conference will delve into the critical importance of cyber security in safeguarding the digital transformation landscape and how cloud computing enhances scalability and flexibility for businesses. The event will also cover the challenges and opportunities posed by Industry 4.0, focusing on sustainable solutions and future innovations that can drive societal progress. It will foster collaboration between academia, industries, and government entities to address real-world challenges, share knowledge, and shape future technology strategies.

**We Invite**  
**Research Papers / Research Posters**  
**from**  
**Researchers, Academicians, Practitioners,**  
**Students and industry experts.**

**Call for Abstract & Research Papers**  
**(Important Dates)**

<b>Abstract Submission Last Date</b>	<b>:</b>	<b>15/11/2024</b>
<b>Notification of Abstract Acceptance</b>	<b>:</b>	<b>20/11/2024</b>
<b>Research Paper Submission Last Date</b>	<b>:</b>	<b>30/11/2024</b>
<b>Intimation of Research Paper Acceptance</b>	<b>:</b>	<b>10/12/2024</b>

**All accepted Abstracts will be published in Conference proceedings with ISBN book.**

**Abstract Submission Instructions:**

1. Link for Registration and Abstract Submission:

<https://forms.gle/yCixLs7cvckY9u9K6>

2. Include the corresponding author's name and email address.

3. Abstracts should not contain references or citations.

4. Ensure that your abstract is clear, concise, plagiarism free and free of grammatical errors.

**Abstract Length:** 250-300 words,      **Language:** English,

**File format:** Word file,      **Font Style:** Times New Roman

**Research paper presentation in absentia is permitted.**

## **Research Paper/Poster Themes: (Refer Sub-topics)**

- 1. Technological Convergence**
- 2. Driving Business Transformation**
- 3. Empowering Industry 4.0**
- 4. Enhancing Cybersecurity**
- 5. Sustainability and Innovation**

**Step-1 : Register and Submit your Abstract for Research Paper / Poster.**

**Last Date: 15/11/2024**



**Step-2 : Submitted Abstract will be reviewed and selected for Conference proceedings Publication book with ISBN.**

**You will be intimated to submit full Research paper with given paper format.**

**Last Date : 20/11/2024**



**Step-3 : Submit final Research Paper as per the given guidelines.**

**Last Date : 30/11/2024**

**Step-4 : Research Papers will be reviewed by the panel and intimated about acceptance by 10/12/2024.**



- Research papers can be presented in absentia.**
- Best three papers will be submitted to the Springer journal for publication.**
  - Best research Paper Award**
  - Best research Poster Award**



## Abstracts for Research Papers/Posters are invited for following Themes & Sub-themes

<p style="text-align: center;"><b>Theme-1 : Technological Convergence :</b></p> <ul style="list-style-type: none"> <li>- AI in Semiconductor Manufacturing: Techniques and Innovations</li> <li>- Data Science Applications in Semiconductor Design</li> <li>- Machine Learning Algorithms for Predictive Analysis in Manufacturing</li> <li>- Deep Learning for Image Recognition in Semiconductor Inspection</li> <li>- Integrating IoT with Semiconductor Technologies</li> <li>- Cross-Disciplinary Approaches: Merging AI with Engineering and Data Science</li> <li>- Application areas of Machine learning and Deep learning</li> <li>- Robotics applications in : Healthcare, Education, Environment</li> </ul>	<p style="text-align: center;"><b>Theme-2: Driving Business Transformation</b></p> <ul style="list-style-type: none"> <li>- Advanced Analytics for Enhanced Decision-Making</li> <li>- Business Intelligence Dashboards: Designing for Impact</li> <li>- The Role of Machine Learning in Business Process Automation</li> <li>- AI-Driven Market Analysis: Predicting Consumer Behaviour</li> <li>- Data-Driven Strategies for Business Growth</li> <li>- Embedding Data Science in Corporate Strategy Development</li> <li>- Statistical Methods for Measuring Business Performance</li> </ul>
<p style="text-align: center;"><b>Theme-3 : Empowering Industry 4.0</b></p> <ul style="list-style-type: none"> <li>- IoT (Internet of Things)</li> <li>- Big Data and Analytics</li> <li>- Artificial Intelligence and Machine Learning</li> <li>- Cloud Computing</li> <li>- Automation and Robotics</li> <li>- Additive Manufacturing</li> <li>- Smart Supply Chains</li> <li>- IoT Solutions for Real-Time Monitoring in Manufacturing</li> <li>- Big Data Analytics for Supply Chain Optimization</li> <li>- Integrating AI with IoT Devices for Smart Manufacturing</li> <li>- Embedded Systems in Industry 4.0: Challenges and Solutions</li> <li>- Predictive Maintenance Using Machine Learning Techniques</li> <li>- Cyber-Physical Systems: Integrating Data and IoT for Industrial Efficiency</li> </ul>	<p style="text-align: center;"><b>Theme-4 : Sustainability and Innovation</b></p> <ul style="list-style-type: none"> <li>- Data Analytics for Sustainable Business Practices</li> <li>- AI in Resource Management and Efficiency</li> <li>- Machine Learning Models for Environmental Impact Assessments</li> <li>- Innovations in Renewable Energy: A Data-Driven Approach</li> <li>- Circular Economy: Leveraging Technology for Sustainability</li> <li>- IoT Solutions for Monitoring and Reducing Carbon Footprints</li> <li>- The Role of Management in Driving Sustainable Innovations</li> </ul>
<p style="text-align: center;"><b>Theme-5 : Enhancing Cybersecurity</b></p>	
<ul style="list-style-type: none"> <li>- AI-Enhanced Cybersecurity Solutions: Current Trends</li> <li>- Data Protection Strategies in the Age of AI</li> <li>- Machine Learning for Threat Detection and Mitigation</li> <li>- Cybersecurity Frameworks for IoT Devices</li> <li>- Ethical Considerations in Cybersecurity Practices</li> <li>- Statistical Approaches for Analysing Cybersecurity Breaches</li> <li>- The Role of Business Intelligence in Cyber Threat Assessment</li> <li>- Cyber-Physical Systems</li> <li>- Threat Detection and Prevention</li> <li>- Machine Learning Techniques for Intrusion Detection Systems (IDS)</li> <li>- Anomaly Detection in Network Traffic Using AI</li> <li>- Behaviour-Based Malware Detection and Classification</li> <li>- Development and Evaluation of Secure Communication Protocols</li> <li>- Cryptographic Techniques for Securing Data Transmission</li> </ul>	<ul style="list-style-type: none"> <li>- Zero Trust Architecture: Principles and Implementation</li> <li>- Cybersecurity Risk Assessment</li> <li>- Business Impact Analysis of Cyber Threats</li> <li>- IoT Security</li> <li>- Lightweight Cryptography for Resource-Constrained Devices</li> <li>- Cloud Security</li> <li>- Incident Response and Forensics</li> <li>- Blockchain and Cybersecurity</li> <li>- Cybersecurity Awareness and Training</li> <li>- Developing Effective Cybersecurity Training Programs</li> <li>- Measuring the Impact of Security Awareness Campaigns</li> <li>- Human Factors in Cybersecurity: Behaviour and Decision-Making</li> <li>- Social Engineering and Phishing Attacks</li> <li>- Privacy and Data Protection</li> <li>- Security Challenges in 5G Networks</li> <li>- AI and Cybersecurity: Opportunities and Threats</li> </ul>

## Categories of Certificates

- 1) Conference participation certificate to all registered delegates.
- 2) Abstract published in conference proceeding certificate on acceptance of Abstract.
- 3) Research Paper/Poster presentation certificate to all researchers who presented their research papers.

## Registration / Delegation Fees

Category	Indian Delegates	Foreign Delegates
Student of UG/PG level	Rs. 800/-	\$20
Research Scholars	Rs.1500/-	\$25
Academician / Faculty	Rs.1800/-	\$30
Members / Others		
Delegates from Corporate/Industry/Non-Academics	Rs.3000/-	\$40

### Online Registration Link

<https://forms.gle/yCixLs7cvckY9u9K6>

### Bank Details

Account Name: VIBHAVNA B.C.A. CENTRE,  
A/C NO: 10000649596, IFSC: INDB0000092,  
Bank Name: INDUSIND BANK (Valsad Branch)

**For Queries regarding Registrations and Conference :**  
**(Only whatsapp messages and emails will be entertained)**  
(Do not call on given numbers. Only WhatsApp) (No Calls will be entertained.)

Dr. Premal Shah	<a href="mailto:premal.shah@dolatusha.ac.in">premal.shah@dolatusha.ac.in</a>	9375853540 (WhatsApp)
Prof. Manish Dodia	<a href="mailto:manish.dodia@dolatusha.ac.in">manish.dodia@dolatusha.ac.in</a>	9925115479 (WhatsApp)
Dr. Rachana Shukla	<a href="mailto:rachna.shukla@dolatusha.ac.in">rachna.shukla@dolatusha.ac.in</a>	9925522909 (WhatsApp)
Dr. Darshna Rajput	<a href="mailto:darshna.rajput@dolatusha.ac.in">darshna.rajput@dolatusha.ac.in</a>	9879124648 (WhatsApp)

## RESOURCE PERSONS



### **Mukesh kumar Rai**

(B.E.(Mech.)(NIT), Masters (I.T.) (IIIT), M.B.A.(IIM))

Principal Engagement Manager

SAP Australia,

**Sydney, Australia**

Session Topic: **“ERP-Reimagined: Cloud-First & Embedded A.I. – A pathway to future proof business.”**

### **Dr. Soma Pandey**

(B.Tech.(Computer)(NIT), M.S.(Embedded Systems), Ph.D.)

Ass. Vice President

IoT Engineering – Jio Platforms Ltd.,

**Bangalore, India**

Session Topic: **“Artificial Intelligence of Things - AI in IoT “**



### **Sairam Mannar**

(B.Tech.(Electronics)(NIT), I.E.S.(Indian Engineering Services))

Director, Programs & Business Development (TCS)

Technology Consulting & Implementation

**Düsseldorf, Nordrhein-Westfalen, Deutschland (Germany)**

Session Topic: **“Convergence of AI and ubiquitous connectivity“**

### **Dr. Vipul Patel**

Ph.D.(Semiconductor & Optics) (NJIT, U.S.)

Principal Scientist, CISCO Systems,

**California, U.S.A.**

Session Topic : **“ Integrating IoT with Semiconductor Technologies “**



### **Dr. Vishwas Raval**

(B.E.(I.T.)(Guj.Univ.), M.Tech.(CSE)(IIT Roorkee), Ph.D.(M.S.Univ.)

Associate Professor & Chief Information Security Officer,

Central University of Gujarat.

**Vadodara, India**

Session Topic: **“Navigating the Digital Frontier: Safeguarding Against Threats in Technological Advancements.“**

## Venue of Conference

### **Sanskar Kendra**

**“Dolat Usha Institute of Applied Sciences  
And**

**Dhiru-Sarla Institute of Management & Commerce, Valsad”  
(Managed by: Shree Nootan Kelavani Mandal, Valsad)**

**Affiliated with**

**Veer Narmad South Gujarat University**



### **How To Reach**

- **Valsad is well connected by Road and Railway.**
- **It is 220 kms from Mumbai and 95 Kms from Surat.**
- **All major trains from Mumbai to Delhi route via Surat stops at Valsad.**
- **Nearest Airport : Surat**

### **Location Link:**

<https://maps.app.goo.gl/ZVngMsd3hrBuKhMQ9>





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**About Us**

Dolat-Usha Institute of Applied Sciences and Dhiru-Sarla Institute of Management & Commerce is an esteemed academic institution established in the green jewel of South Gujarat, the city of Valsad under the management of Shree Nootan Kelavani Mandal. The origin of the educational trust Shree Nootan Kelavani Mandal can be traced back in the 1956, when its pioneers like Late Shree Morarji Desai, the ex-Prime Minister of India, Late Shree Siddharthbhai Lalbhai Sheth, and Shree Kantilal Ranchhodji Desai succeeded in accomplishing their long cherish dream of providing opportunities of higher education to the socially backward communities of Valsad District. The trust made a humble beginning by initiating Shree Nootan Kelavani Mandal Arts and Science College in 1957.

Before the onset of the millennial year, when the academic scenario was changing at a galloping pace, an urge was felt to introduce graduation courses in the field of Sciences that could match the needs of modern education. In 1999, Dolat-Usha Institute of Applied Sciences and Dhiru-Sarla Institute of Management & Commerce was established by initiating three undergraduate courses [B.Sc.-Microbiology, B.Sc.-Computer Science, B.C.A] and in 2001 one Post-Graduate course P.G.D.M.L.T., the seeds to set up an educational institution with academic excellence were sown and thus began the journey through highest standards of quality learning and resourceful infrastructure. Later on in 2008 B.B.A., in 2014 M.Sc. Microbiology and in 2016 B.Sc. and M.Sc. Chemistry Programmes were started. M.Sc. in Computer Application programme started in the year 2023. Starting in 1999, the Microbiology department has entered in its Silver Jubilee year in 2024. As a part of a celebration, the Institute as well as the Microbiology department is committed to organize various academic activities this year.

**Computer Science & Application Department**



**Organizing Team**

**Dr. Snehal K Joshi (Convenor)**

<b>Prof. Manish Dodia,</b>	<b>Dr. Rachana Shukla,</b>	<b>Dr. Premal Shah,</b>
<b>Dr. Akruiti Naik,</b>	<b>Dr. Yatin Solanki,</b>	<b>Dr. Darshna Rajput</b>
	<b>Dr. Nirav Desai</b>	
<b>Shri. Divyesh Patel</b>	<b>Smt. Bhargavi Mistry</b>	<b>Prof. Anvi Patel</b>
<b>Prof. Divyanshi Patel</b>	<b>Prof. Karina Tandel</b>	<b>Prof. Dhruvisha Tandel</b>

# For Accommodation

Various Accommodation Options in and Around Valsad for Conference Attendees:

1. **Hotel Grand Sunrise** (Location: Valsad City )
2. **Hotel Easy Retreat** (Location: Near Tithal Beach, Valsad)
3. **The Lords Resort, Valsad** (Location: Near Tithal Beach)
4. **Hotel Apple Inn** (Location: Valsad City)
5. **Hotel Maharaja** (Location: Valsad City)
6. **Udvada Beach Resort** (Location: Udvada (Approx. 20 km from Valsad))
7. **Hotel Royal Shelter** (Location: Near Railway Station, Vapi (Approx. 30 km from Valsad))
8. **Daman Ganga Valley Resort** (Location: Daman (Approx. 60 km from Valsad))
9. **Hotel Apex Inn** (Location: Valsad City)

Various Guest Houses at (i) Saibaba Temple, Tithal (ii) Swaminarayan Temple, Tithal (iii) Shanti Dham, Tithal  
Plan your stay and enjoy the comfort and convenience these accommodations offer during your time at the conference!

## For Accommodation guidance Contact :

- (i) Dr. Yatin Solanki (M: 9825054460) (ii) Mr. Divyesh Patel (M: 7069062828)  
(iii) Dr. Nirav Desai (M: 8460543844)

## Places to Visit Around

### 1. Tithal Beach:

Just 3 km from Valsad, Tithal Beach is known for its black sand and soothing Arabian Sea views. Ideal for relaxing walks and enjoying local street food.

### 2. Wilson Hills:

Located 30 km from Valsad, Wilson Hills is a tranquil hill station with stunning views of the sea and lush valleys. Perfect for nature enthusiasts and trekkers.

### 3. Parnera Fort:

About 10 km away, this ancient fort offers a trek with a rewarding view from the top. Explore historical ruins and visit the old temple within the fort premises.

### 4. Swaminarayan Temple, Tithal:

Near Tithal Beach, this beautifully designed temple is a place for spiritual relaxation. The architecture and peaceful ambiance make it a must-visit spot.

### 5. Dandi Beach:

Located 45 km from Valsad, Dandi Beach is historically significant as the site of Mahatma Gandhi's Salt March. A peaceful spot with historical importance.

### 6. Shrimad Rajchandra Ashram, Dharampur

Around 35 km from Valsad, Dharampur is nestled in a scenic valley with rivers, palaces, and lush green surroundings. The Lady Wilson Museum is also worth a visit.

### 7. Udvada Atash Behram

Situated 20 km from Valsad, Udvada is home to one of the oldest Zoroastrian fire temples. It's a place of cultural and religious significance for the Parsi community.

### 8. Daman Fort

Approximately 25 km from Valsad, Moti Daman Fort in Daman is an impressive Portuguese-era structure. It offers a peek into colonial history and stunning views of the sea.

### 9. Vansda National Park

About 50 km away, this national park is a biodiversity hotspot. Explore the rich flora and fauna of the Western Ghats, including a variety of bird species and wildlife.

### 10. Gira Waterfalls

Around 50 km from Valsad, this picturesque waterfall near Waghai is a must-visit during the monsoon season. The surrounding greenery and flowing water create a serene environment.

### 11. Atul Campus

Atul industries campus is full of greenery and worth visiting. It has dense trees and at the bank of Par River. The pleasant and serene environment is really amazing.

"Explore these attractions for a perfect blend of history, nature, and relaxation during your conference visit!"