



## HBNI ALUMNI WEBINAR

**Thursday,  
24th April, 2025  
at 17.00 hrs.**

**Venue :- HBNI Council Hall,  
2nd Floor, Training School  
Complex, Anushaktinagar,  
Mumbai**

### Link of :-

#### YouTube:

[https://youtube.com/live/QW-BD5\\_kHv0](https://youtube.com/live/QW-BD5_kHv0)

#### Webex:

<https://hbni.webex.com/hbni/j.php?MTID=mdc71b63339965d2aa1092b163ca107bd>

## Dr. Amit Chandrakar

Principal Data Scientist,  
Symphony Incubator Business  
Services Private Limited  
(SymphonyAI), Bangalore



## ■ “AI and Machine Learning Applications and Future Scope in Industrial Domain”

Dr. Amit Chandrakar is an Alumnus of Homi Bhabha National Institute (HBNI). He obtained his Ph.D. in Engineering Sciences (Mechanical Engineering) from Bhabha Atomic Research Centre, a CI of HBNI in the year 2015. He completed his BE in Mechanical Engineering from NIT Raipur and M. Tech. in Reliability from IIT Bombay. After completing his Ph.D., he has acquired extensive experience in Industry - worked as Reliability Engineer in Eaton Technologies Pvt. Ltd. Pune; Senior Analytics Engineer in General Electric; Lead Data Analytics in Airbus India. He is also DFSS Green Belt certified by Eaton Quality Institute. Currently, he is serving as Principal Data Scientist in Symphony Incubator Business Services Private Limited. At SymphonyAI, he is at the forefront of the industrial transformation, spearheading APM 360™ for multiple steel and aluminium rolling plants. He is in charge of program management and technical leader to drive the implementation of cutting-edge predictive models that harness the power of AI to enable predictive maintenance.

## ■ Abstract

The integration of Artificial Intelligence (AI) and Machine Learning (ML) into the industrial domain is revolutionizing traditional manufacturing and operational paradigms. This talk explores the current applications and potential future scope of AI and ML technologies in various industrial sectors. Presently, AI and ML enhance productivity, efficiency, and predictive maintenance by enabling smart manufacturing processes, optimizing supply chain logistics, and implementing autonomous quality control systems. Advanced data analytics drive decision-making by extracting insights from vast datasets, fostering innovation and customization in product development. Robotics powered by AI are executing tasks with precision and adaptability, reducing human error and operational downtime. Furthermore, predictive analytics and anomaly detection are significantly minimizing risks and enhancing safety protocols. As the industrial internet of things (IIoT) continues to expand, AI and ML are pivotal in harnessing the vast data generated for improving operational scalability and sustainability. Looking ahead, AI and ML hold the promise of deeper integration with edge computing, fostering decentralized and real-time decision-making capabilities. Ethical considerations and workforce implications of AI adoption are crucial areas of focus, ensuring responsible and equitable technological advancement. This talk underscores AI and ML's transformative potential in driving the next industrial revolution, promoting innovation, and achieving sustainable growth.

**All are cordially invited for in person attendance**