

# IOT SOLUTIONS BASED ON ALAND ML

Artificial Intelligence (AI) and Machine Learning (ML)



A Handbook on IoT solution based on AI and ML

## OUR SUITE OF AI AND ML POWERED IOT SOLUTIONS HELP YOU ACHIEVE YOUR BUSINESS NEEDS EFFICIENTLY

Artificial Intelligence (AI) and Machine Learning (ML) are the most transformative technologies adopted by businesses today. We assist you in leveraging the benefits of these emerging digital technologies so that your business is always future-ready.

Learn more about our expertise and service offerings for the design and development of *IoT solutions powered by AI and ML*:

#### 1) Development of IoT Sensors for Data Collection

- a) Hardware and Software Development services for IoT Sensor Nodes
- b) Design and development of IoT Sensor Network to collect data

#### 2) Data Cleaning, Filtering and Feature Extraction

- a) Identification of relevant data parameters from the set of raw data collected by the IoT Sensors
- b) Filtering of the collected raw data, as per the requirements of the business application

#### 3) Evaluation and Identification of the ML Model

Evaluation and identification of a suitable Machine Learning Model (neural networks, decision trees, regression models, classification models, etc.) based on the problem-statement and parameters.

#### 4) Training the ML Model

Segregation of filtered data into 'training data' and 'validation data'.

- a) Training data: Input data along with output labels for training the Machine Learning Model (multiple iterations)
- b) Validation data: Input data without labels, to evaluate the prediction capability of the Machine Learning Algorithms

#### 5) Outcome Prediction

- a) When an AI algorithm is exposed to a large amount of real-time and historical data, it can make predictions with a high degree of accuracy.
- b) The trained model can, hence, effectively predict the output of the validation data.

#### 6) Development of Artificial Intelligence Applications

- a) Development of cloud-based SCADA solutions and other web-based desktop applications
- b) Design and development of Mobile Apps
- c) HMI/UI design and development services

#### **CONNECT WITH US**

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### Get in touch with our Team



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