

Automation Pathshala The Month of Al

Where Passion Meets Learning





NISARG KADAM



UiPath Global Hackathon Winner 2020 & 2021

Automation Architect WonderBotz

Weekend YouTuber

Bike Rider / Quarter Litre Racer

I love writing blogs

I love creating travel vlogs

I was a professional dance choreographer







PRADEEP CHINNALA



UiPath Mentor Senior Consultant WonderBotz

Seasoned UiPath Mentor

Senior Consultant WonderBotz

Certified RPA UiPath Developer

Part-time Trainer for UiPath learners

Ability to handle the end-to-end projects

Interests:

Traveling, Swimming and badminton



OUR SPONSORS









Automation Pathshala – 1.0





Automation Pathshala

8 videos • 3,302 views • Last updated on 9 Nov

Public V



2021



No description



nisarg kadam



Learn UiPath development foundation from scratch with Automation Pathshala | Nisarg Kadam | Day 1

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Learn UiPath development foundation from scratch with Automation Pathshala | Nisarg Kadam | Day 2

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What is RPA?



Mimics human action

Quick to implement and powerful to scale

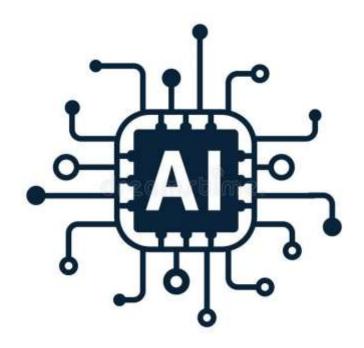
Operates any application

RPA

No mistakes and without resting

Structured reading and actioning data

What is AI – Artificial Intelligence?

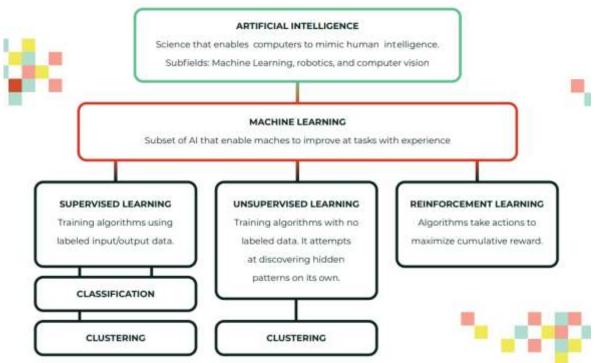


Science that empowers computers to mimic human intelligence such as decision making, text processing, and visual perception.

Ai is a broader field (i.e.: the big umbrella) that contains several subfield such as machine learning, robotics, and computer vision.

What is Machine Learning?



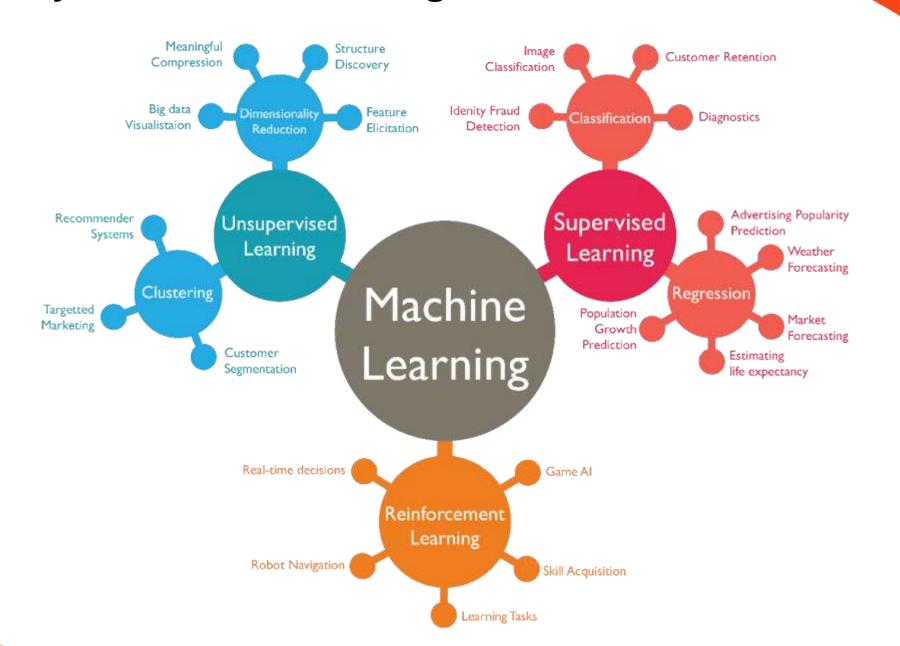


· Machine Learning is a subfield of Artificial Intelligence that enables machines to improve at a given task with experience. It is important to note that all machine learning techniques are classified as Artificial Intelligence ones.

However, not all Artificial Intelligence could count as Machine Learning since some basic Rule-based engines could be classified as AI but they do not learn from experience therefore they do not belong to the machine learning category

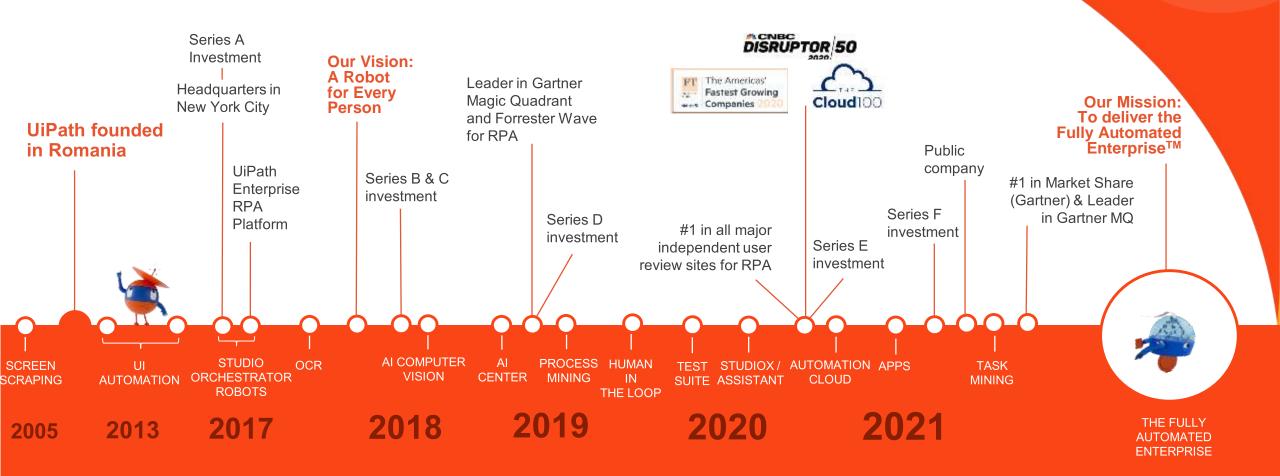
Hierarchy of Machine Learning?





About UiPath

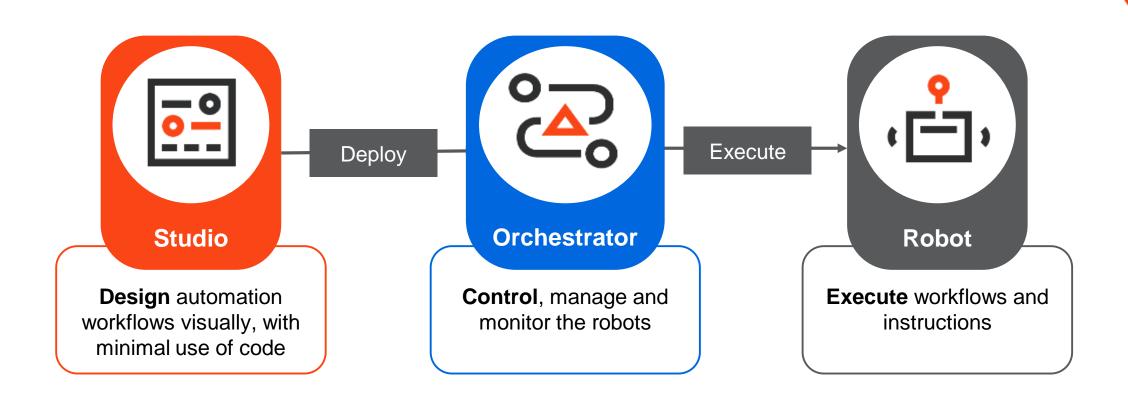




UiPath Platform



The UiPath Suite has three core components, which are are:



UiPath Products



UiPath Al Center

- Automation Hub
- Task Capture
- Process Mining
- Task Mining

Discover



- Studio & StudioX
- Document Understanding
- Automation Ops
- Integration Services
- Marketplace

Build



- Orchestrator
- Al Center
- Test Suite
- Data Services
- Insights

Manage



- Robot
- Attended Robots
- Automation Cloud

Run



- Apps
- Assistant
- Action Center

Engage





What is Artificial intelligence (AI) ?

Artificial Intelligence (AI)

Any technique which enables systems to mimic human intelligence.

Machine Learning (ML)

Collection of techniques that allow systems to learn from data

Deep Learning (DL)

Collection of techniques that use Deep Neural Networks.

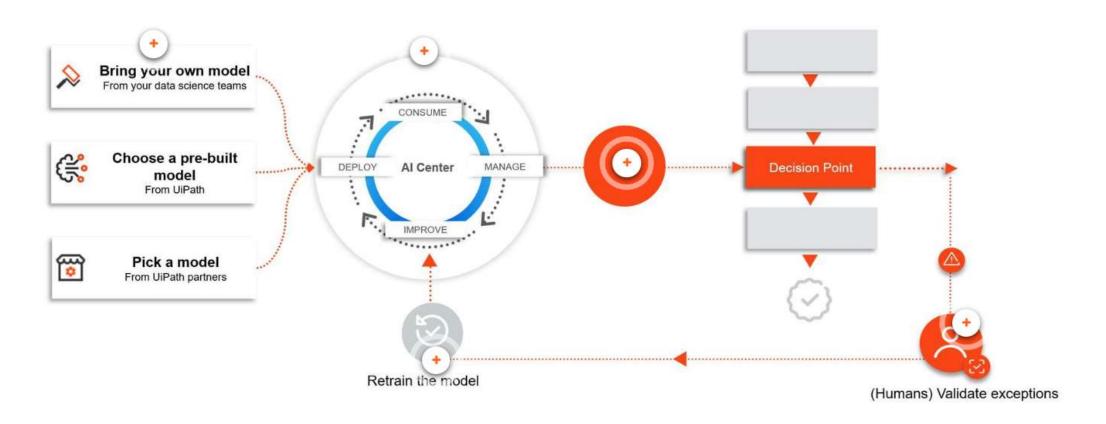
Natural Language Processing (NLP)

Makes human language accessible to computers



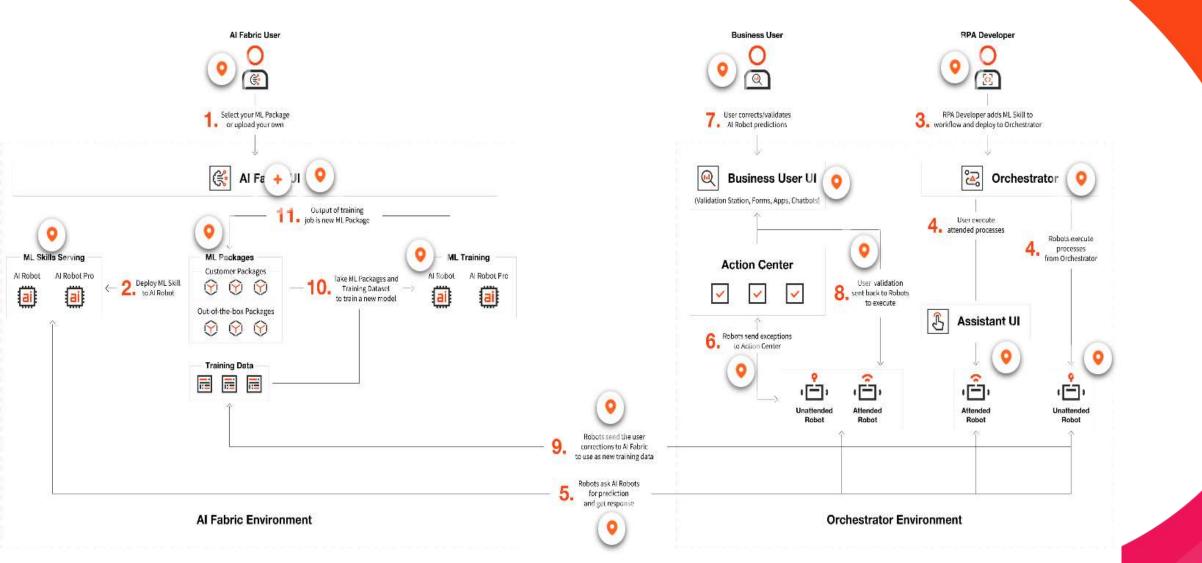
Al Center and Working Mechanism

AI Center is UiPath's machine learning platform, which enables customers to deploy, consume, manage and improve ML Skills developed in-house, by UiPath, or by UiPath partners





How Al Center interacts with the UiPath ecosystem :



> Identifying the Use cases:

Uncertainty

You cannot determine an outcome with 100% certainty

High Variability

There is too much variability for rules based

Unstructured Data

Information like articles, documents, images, videos and emails is unstructured







Lean Defaults



Inventory Forecasts



Resume Matching



Purchase Decisions



Language Translation



Invoice Extraction



Email Rounting



Speech to Text



Groups of user handling the Al Center.

RPA COE

Challenges:

- Is difficult to add easily AI capabilities in their automations;
- No access into Data Science team's models;
- Which model is the right fit;

With AI Center they can:

- Automate complex and cognitive processes;
- Get visibility into Data Science team's work;
- Select an ML model suited to your business needs.

Data Scientist

Challenges:

- Lack of a standard delivery mechanism for their models;
- No visibility into model performance;
- Not sure when a model needs to be retrained and difficulty to gather the additional data.

With AI Center they can:

- Put ML models in the hands of more people, faster
- Get visibility into model use and performance;
- Retrain models with new data coming from business validation.

Business User

Challenges:

- Misalignment between AI projects with business priorities;
- Don't know how to apply AI to business problems;
- No easy way to see business impact;

With AI Center they can:

- Improve model's performance with domain expertise;
- Handle exceptions, validate model predictions;
- Make decisions based on predictions.



Examples for the Use cases:

General

Resume Matching

Help Desk Answers

Customer Churn Prediction

Customer Complaints -Email Classification

Quality - Visual Inspection

Healthcare

Real Time Pregnancy Risk Evaluation

Patient Receivables Management

Prospensity of Claim Denial Prediction

Fraudulent Medical Claim Prediction

> Readmission Prediction

Retail

Packaging Quality Evaluation

Inventory Management

Merchandising Planning

Product Recommendation

Pricing Optimization

Financial Services

Fraud Detection

Personal Loan Approval

KYC - Entity Identification

AML Alert Classification

ID Information Extraction

Professional Services

RFP Opportunities

Deal Guidance

Data Extraction from Charts

Auditing - Anomaly Detection

Legal - Win/Loss Rate Prediction

Al Center offers more than 25 trainable and pre-trained ML models, enabling hundreds of use cases



UiPath Document Understanding

Invoices – Generic, India, Australia, Japan

Receipts

Purchase Orders

Utility Bills

Generic Document Understanding

Contracts – preview

Passports & ID cards – preview

Language Analysis

Text Classification – English, French, Japanese, multi-language

Language Detection

Language Translation – English to French, English to German, English to Russian

Named Entity Recognition
– pretrained, custom (preview)

Sentiment Analysis

Language Comprehension

Question Answering

Semantic Similarity

Text Summarization

Image Analysis

Image Moderation – Explicit, explicit-drawing and more

Object Detection

Image Classifier – coming soon

Tabular Data

Regression

Classification

Others

Time Series

Custom-built Models

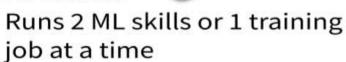
Licensing and Pricing :





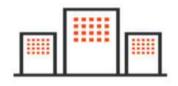
Cloud





Al Robot Pro

Runs 2 ML skills or 1 training job at a time with GPU available



On-premise

Al Robot

Runs 2 ML skills or 1 training job at a time

On-prem AI robots can utilize available GPUs; there's no need for a *Pro* version

Operationalization of Al Center?

Ui Path Community

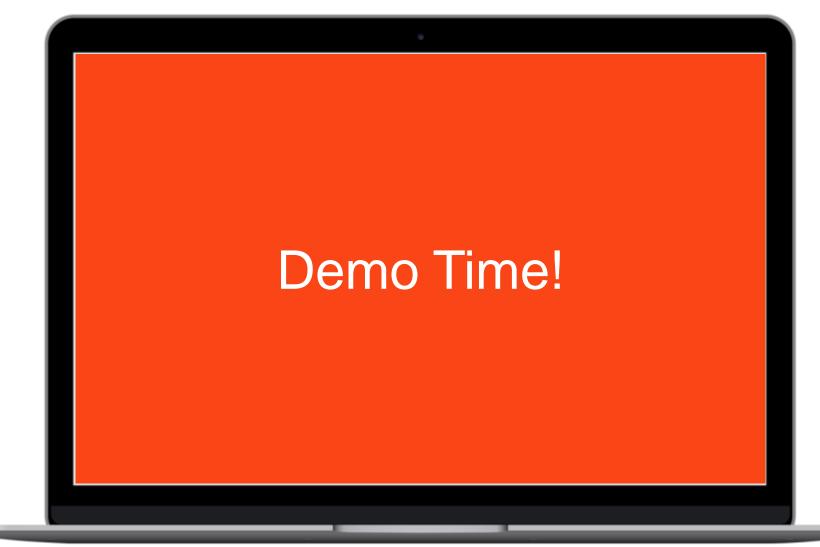
Choose a model

Build an ML Skill in **UiPath Al Center**

Drag and drop ML Skill into RPA workflows in **UiPath Studio**





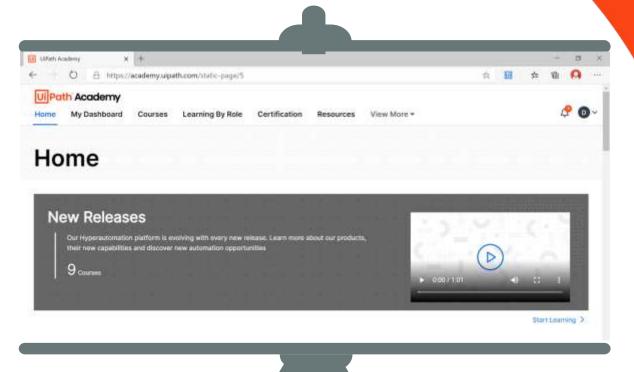


UiPath Academy



The UiPath Academy empowers you to grow as a professional and reach new heights in the digital era by providing latest study materials on RPA.

- Open online platform offering free RPA training
- Helps you to progressively build your automation skills with the help of a variety of courses
- Take on-demand courses, enroll in rolebased learning paths, and get comprehensive product training.
- To Know more visit... https://bit.ly/37k1MoW



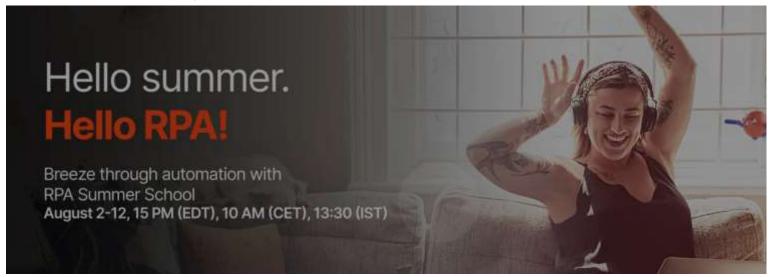
Ui Path Community

Ui Path Community

Vibrant ecosystem of nearly 1 million professionals and citizen developers learning, getting support, and succeeding together in their automation careers.

Automation Cloud	Start with the free Community Edition to get trained and certified
Academy	 Learn the skills of the future on <u>UiPath Academy</u> or through our <u>Academic Alliance</u> Earn globally recognized credentials with <u>UiPath Certifications</u>
Forum	 Get crowdsourced support and share product feedback on <u>UiPath Forum</u> Check the product <u>documentation</u> Join the <u>Insider Preview</u> for early testing
Community Events	 Connect with like-minded people and share best practices with the <u>UiPath Community</u> Solve challenges in engaging <u>hackathon</u> competitions Join meetups and <u>conferences</u>
Blog and Tutorials	 Access the latest articles and video tutorial content created by community members and UiPath engineers in our Community Blog Contribute as an author.
UiPath Community MVPs	Get recognized as a Most Valuable Professional (MVP) or one of the Forum Leaders, based on the contribution to others' growth

https://community.uipath.com/RPASummerSchool/



https://community.uipath.com/events/details/uipath-hackathons-presents-uipath-hyperhack-2022/





