
Adopt Visual AI with ease
kandula.ai

Prologue to a Journey with AI

The world is reshaping its course with Digital & technology-based innovations, the destination of Metaverse is a true possibility today. The aspirations of this destination are so intriguingly human centric that we take steps and strides to make the world better. At the core of this human centric approach is data and so the digital natives have been contemplating several information centered approaches to create a path to the greater destinations.

The tenet of such approach follows -

- Data Asset as an Open resource and to be made available for Collaborations within Business.
- Making Data accessible and available.
- A data Landscape with variety of data becomes essential to innovate
- A plethora of Standards, processes and tools working in tandem to drive AI
- Semantics from Data can lead to untapped potential.
- Insights to mature with perception and reasoning augmenting Analytics.

To make this pursuit in the Data journey with ease, kandula.ai was born, to untap the potential from Video and Image data. The platforms aim to be a companion in the Data journeys for Enterprises, Businesses, and its AI/ ML engineers to reach outcomes aided & augmented by Visual Intelligence.

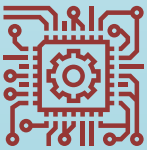
Team Pavo & Tusker Innovations

Click Pause

770 million CCTV cameras are currently operating worldwide and capturing moments & events the world is yet to notice. How many CCTV cameras are there in your organization?

An estimate of 70+ Exabytes of Image and Video are generated every year by Enterprises. How much Video and Image data is stored in your organization? How much of it is processed to generate Insights or Alerts?

An estimated 2 million data scientists are required by Industries by 2025. How many of this rare breed of humans does your organization nurture?



Currently, there are 5 major AI frameworks, 20+ tools to build ML pipelines, 500+ SOTA Algorithms to choose from, 2 GPU Hardware providers, 4+ major Cloud Infrastructure providers and at least another 10+ factors that constitute towards a successful AI implementation.

Enterprises and Businesses are at different phases & maturity in adopting AI / ML. Taking up the complexity of engineering, R&D and competency building; to scale across the organization requires effective, agile & efficient processes, frameworks and tools.

Computer Vision aided innovation for the fast, competitive & modern era.

Elements of Visual AI

To build Visual Intelligence Solutions that can provide meaningful outcomes, Organizations need to manage data, AI / ML semantics, technologies, infrastructure, domain semantics, teams, processes, standards, and compliances. The elements that constitute in building effective Visual AI solutions as grouped below.

Data Management

Identify
Collect
Organize
Annotate
Augment
Generate

Model Management

Discover
Try
Test
Train
Orchestrate

Operations Management

Deploy
Latency
Scaling
Throughput
Performance
Governance

Knowledge Management

Explore
Search
Analytics
Perceive
Performance
Alerts

Elements of Visual AI consists of myriad number of specifications to be defined and executed consistently. Business managers, Product Managers need to mix and match different constituents / elements from all stages to deliver data driven outcomes.

kandula.ai

A no-code platform to assist Visual AI development and automate workflows.

A platform with rich & intuitive user experience to guide Data engineers, AI engineers, Computer Vision engineers, data annotators, Analysts and Data scientists in every step of their organization's data transformation journey.

OneStore

Storage

Upload media data into highly scalable data lake storage. Automated metadata management & effective centralized storage management.

Collections

Feature Catalog

Analyze videos & images against benchmarked AI models to understand the data better. Generate categories and group images as clusters to visualize quality of data sourced.

Datasets

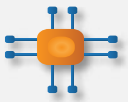
Features & Versions

Prepare data for experimentation on the problem statement. Label or Annotate data manually or with AI assistance with continual learning. Manage versions of datasets prepared before being trained. Annotations for Classification, Object Detection, Segmentation & landmarks across images, videos

Clipper

Video Processing

Data sourced as Videos needs to be. analyzes to generate only Images relevant to use cases. This is enabled by a real-time frame selection from clips.



Swell

Augmentation

In scenarios of data scarcity and more data is required for AI training, additional data is generated with image properties and feature based synthetic data using AI.

Stitcher

Image Stitcher

Images or videos captured from Satellites, Drones or multiple camera devices needs to be stitched together to empower large image canvas-based outcomes.

Most of the AI experiments fail, due to improper handling of data preprocessing , handling and inaccurate labeling/annotation. Organizing, curating & moderating data flows with data / AI engineers can be non-standard and erroneous.

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Feeder
Data Sourcing

Apart from data generated for Augmentation and synthetic data based on features, data can be sourced from Internet by referencing images within the datasets.

Composer
AI Experiments

A comprehensive AI studio comprising of 100+ Algorithms for Classification, Object Detection, Segmentation. The studio enables pipeline building with Transfer Learning or Meta Learning for AI engineers to choose from.

Droids
AI Serving

The Intelligent agents are made available for deployments to predict and infer. The agents enable Counting, Measuring, Detecting, Tracking to Alert, Capture Events, and Insights.

Settings
Workspaces

Govern Users, groups & their data within Workspaces. Enable features to users based on their subscription plan.

Colab
Live Collaboration

Enabling Live collaboration of Users across Onestore and Datasets in the process of preparing & annotating for AI training.

Notification
User Alerts

System and Users Alerts based on platform scenarios & events.

Based on continuous researching, more features and tool chain for Visual AI pipelines are part of the platform roadmap.

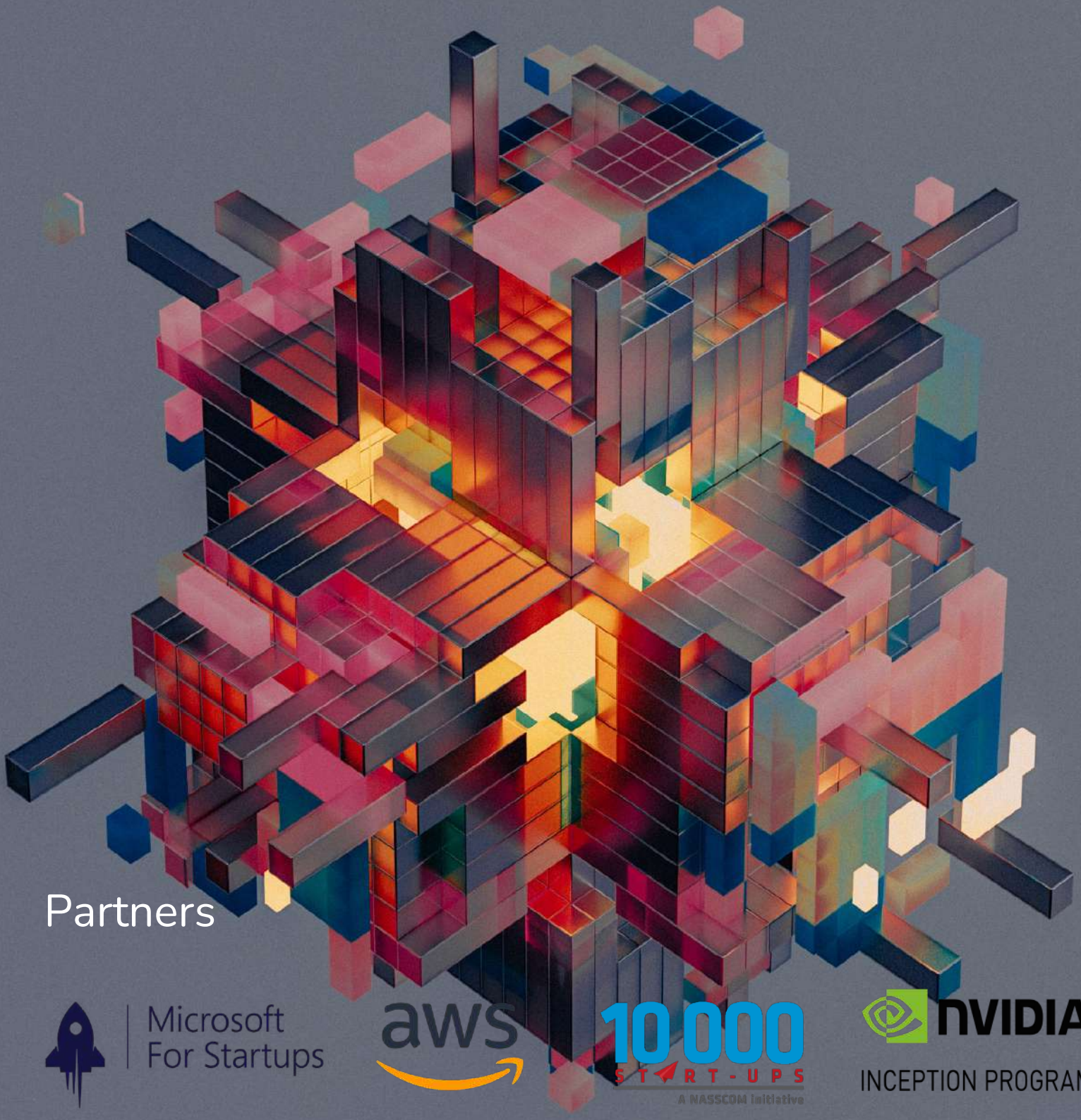
AI being considered as a black-box, engineers experiment sequentially until desired outcomes are reached. Designing & driving successful outcomes with AI requires long execution cycles and complex technologies to work in tandem.

Value & Benefits

- Reduce execution time from Months to days
- AI Assisted Annotations
- Unlock synergies within Team members with Collaboration
- Quality review of Annotations
- Intuitive Self-service
- Comprehensive Exploratory Analysis
- Single Click Deployments and platform built with 25+ technologies
- 6 varieties of AI Techniques in one place

30%	4X	40%	30 %
better data quality	faster development time	better knowledge retention	Lower TCO

Innovate with us!



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