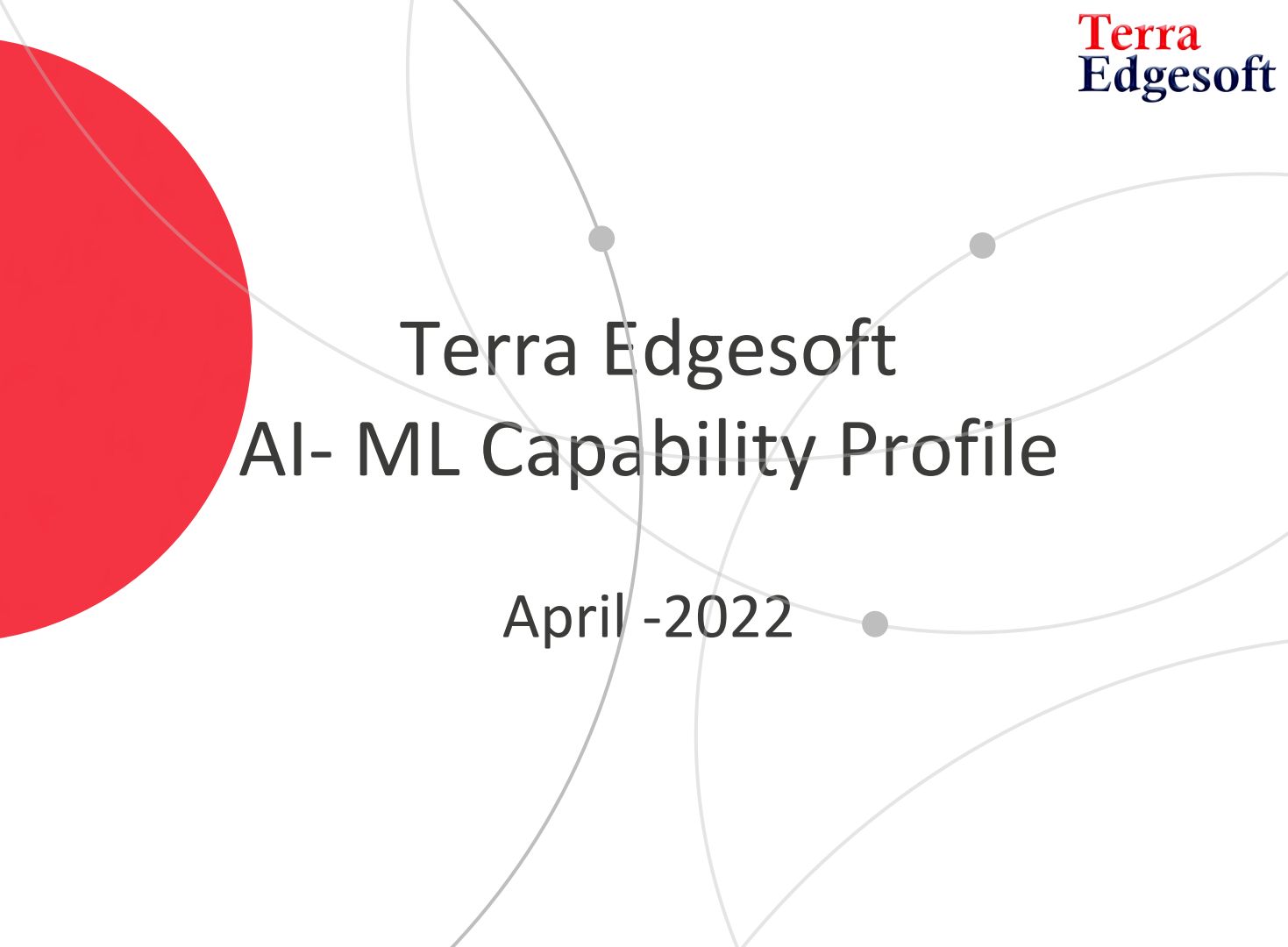# Terra Edgesoft
AI- ML Capability Profile

April -2022

About Us

"Terra Edgesoft provides customised bespoke Applications & Network Services for automation of processes & systems in the field of IT & Telecom"

Core Competencies

Concept, Design, Development

- Telecom Services
- Enterprise Requirements
- AI/ML/NLP Solutions
- Telecom Cloud Module Requirements
- Enterprise Cloud Services Delivery

Developement / Deployment

- Software Projects
  Customisation, Delivery
- Integration
- Testing / Handover
- On Premise Deployment
- Cloud Deployment

Migration & Support Services

- Network Optimisation
- Performance Optimisation
- CI/CD
- DevOps Services
.Upgrade, Monitoring and Stabilisation

Upgrade & Maintenance Services

- Swap
- Phase wise Enhancement
- Feature Addition
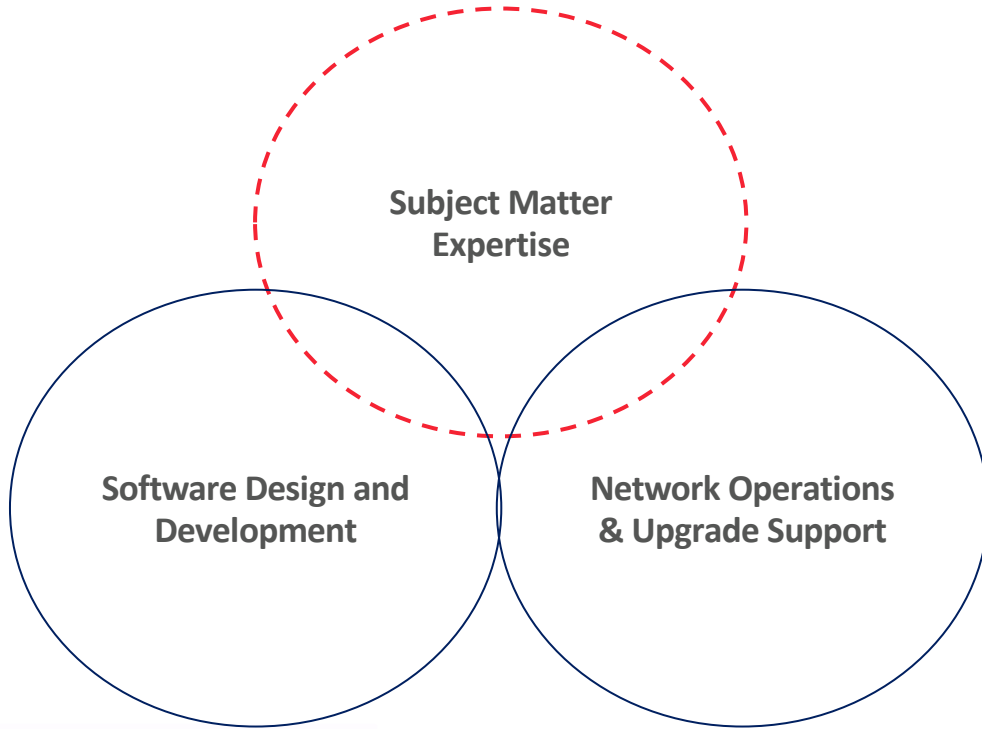- Technology Migration

Global Presence

- **Terra EdgeSoft Office**

  - Terra EdgeSoft Private Limited, India, UAE

  - Simplex Solutions Private Limited, Japan, India, USA

- **Business Associates / Representatives**

  - Middle East/North Africa :Dubai, Oman, Afghanistan, Tanzania, Egypt, Kenya, South Africa, Nigeria. Congo(DRC), Senegal, Kenya

  - North America : Canada, USA

  - Asia / Pacific : Sri Lanka, Bangladesh, Nepal, Myanmar

  - Australia/ NZ : Australia

  - UK & Europe

Terra EdgeSoft Offerings

Terra
Edgesoft

Subject Matter Expertise

Software Design and Development

Network Operations & Upgrade Support

Value Proposition

• **Local sourcing of Resource** : Continuity and Local Network Knowledge

• **On going operations across various geographies.**

• **Flexible Model of engagement :** Time Based/ Task

Based/ Consulting Services/ Program management

• **On Site/ Off Site services Model** : Resulting in Ontime, high quality & Cost-efficient services delivery.

• **Resource ramp up / down as per the project demand.**

Software Services and Development Centre Capability
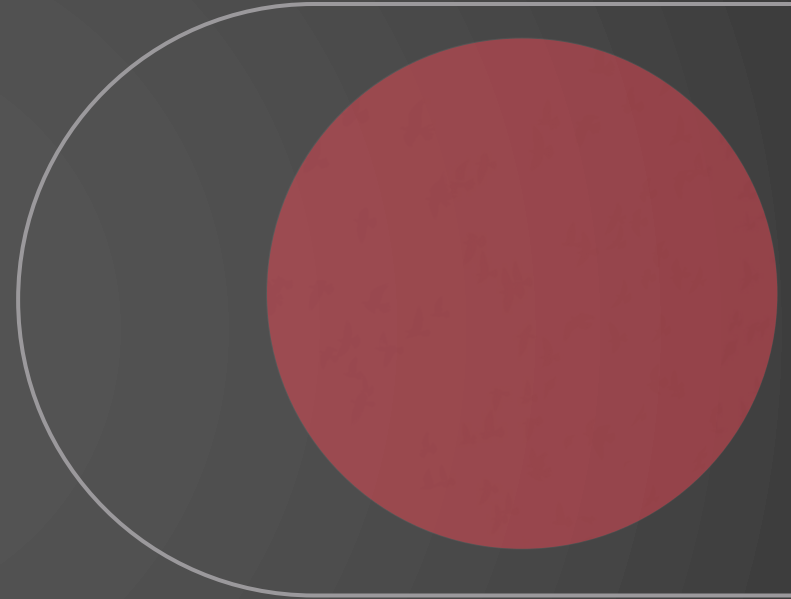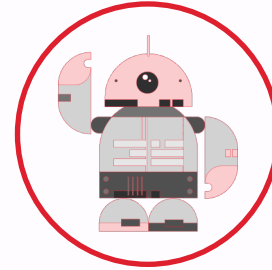
About Our AI Group

At Terra Edgesoft our AI – ML – NLP Group is focused on carrying out basic research and create platforms which are benchmarked against existing references. We have team of expert mathematicians, researchers and software scientists to address client need
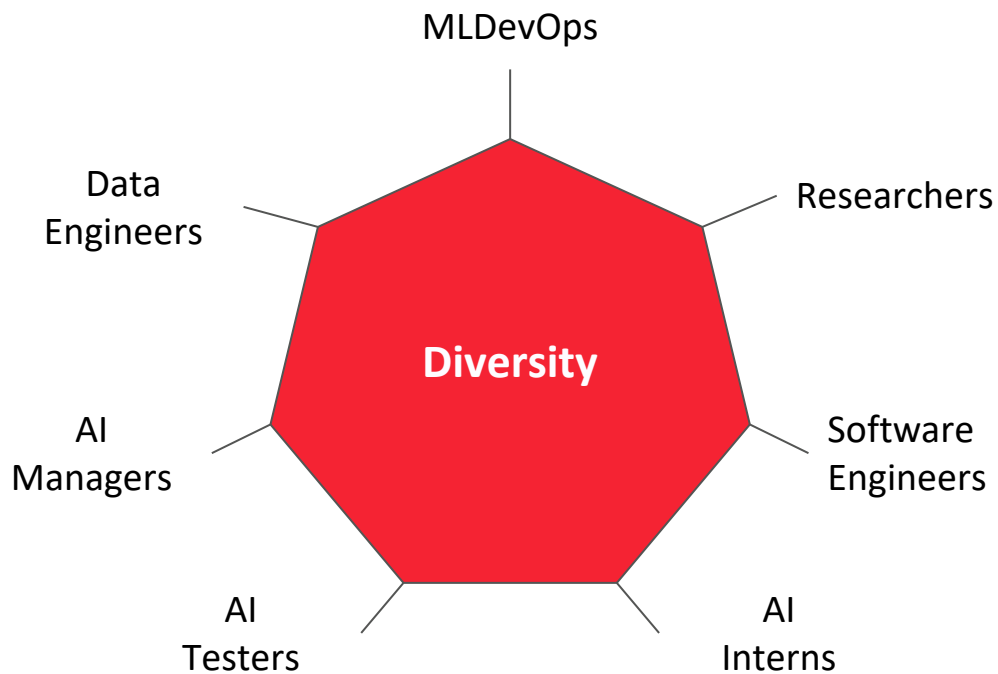
Software & IT Services

Professional Services

Software Customisation / Service Development

AI/ML Analytics / Consulting

Expertise – Efficiency - Flexibility

Team Background

MLDevOps

Researchers

Data Engineers

Diversity

Software Engineers

AI Managers

AI Testers

AI Interns

Experience	**1 to 10+**
Foundation	**100% Masters, 30% PhD**
AI Skills	**Data Collation, Conventional Machine Learning, Deep Learning, Interpretations, Model Serving and Visualization**
Language	**Python, R, Java, SQL and Matlab**
Cloud	**AWS, GCP and Azure**
Cloud AI	**Google Cloud AI, Azure AI and AWS AI**
Distributed	**Hadoop and Spark**

Offerings & Benefits

Text Analytics

Voice Analytics

Artificial | Intelligence

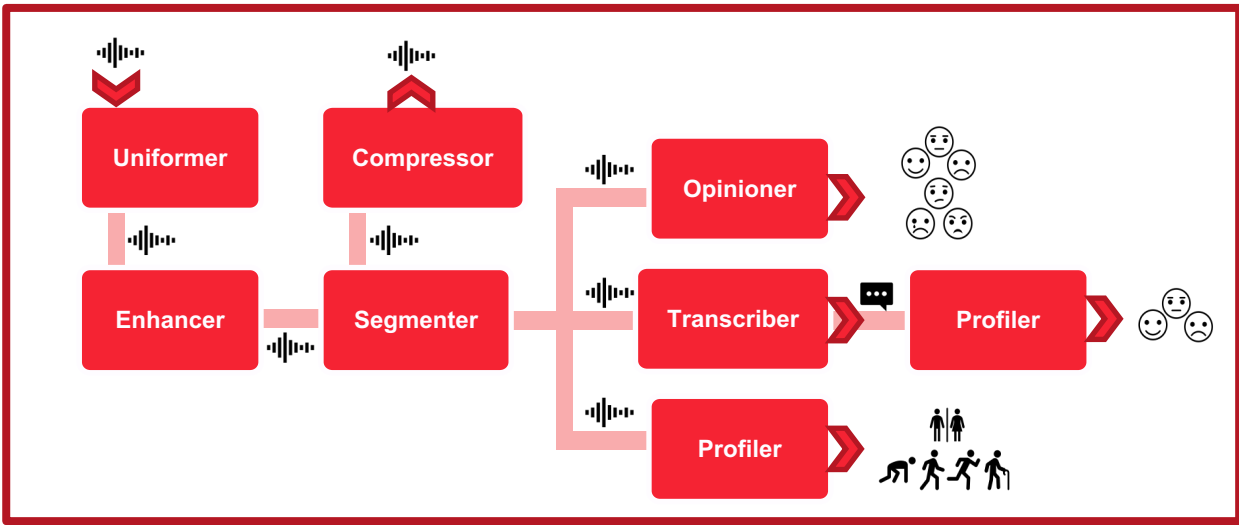Service | Stack

Vision Analytics

Data Analytics
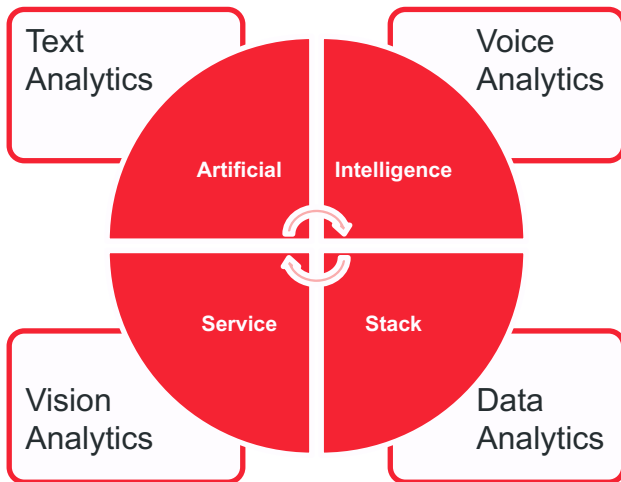
Unstructured Data → AI Service Stack → Structured Information

- Deliver Structured data from any kind of Unstructured Data (Text, Audio, Image, Video and Numbers).
- Optimize the development and deployment time for early go-to-market.
- Serve benchmarked models easily on any infrastructure of choice.
- Effortlessly customize model.
- Easy Integration with Plug-and-Play Microservice APIs.
- Always stay ahead with model's continuous learning and training capabilities.
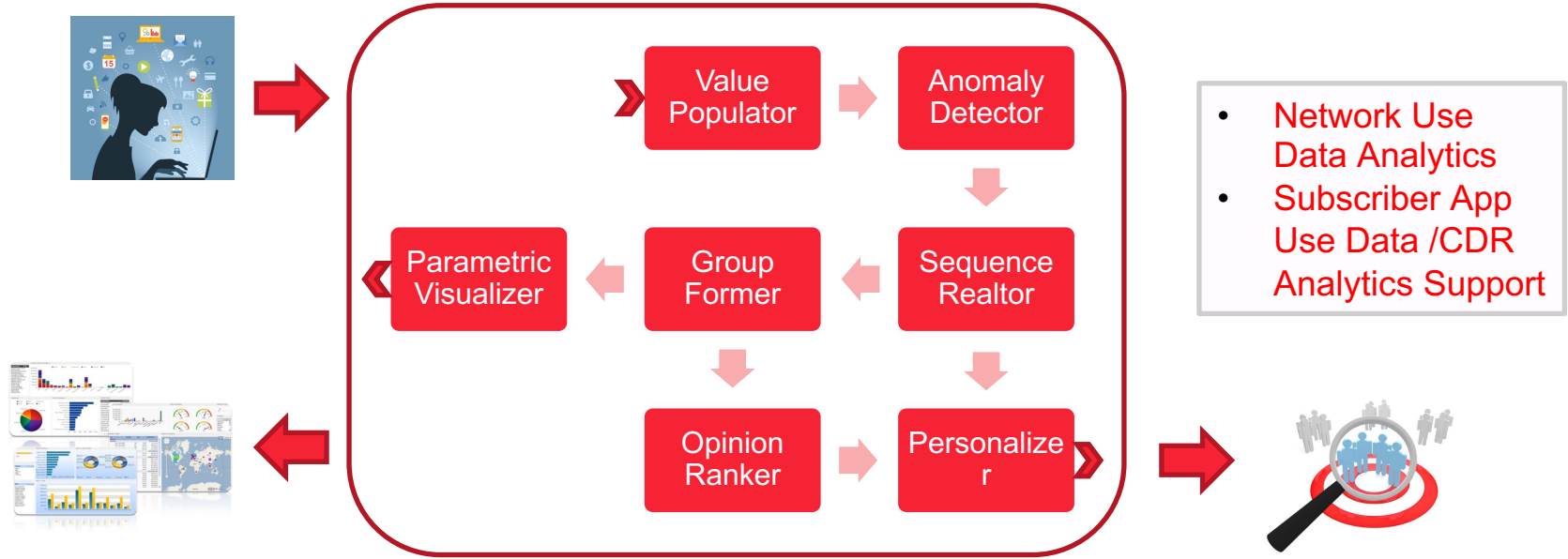
Voice-in-Sights

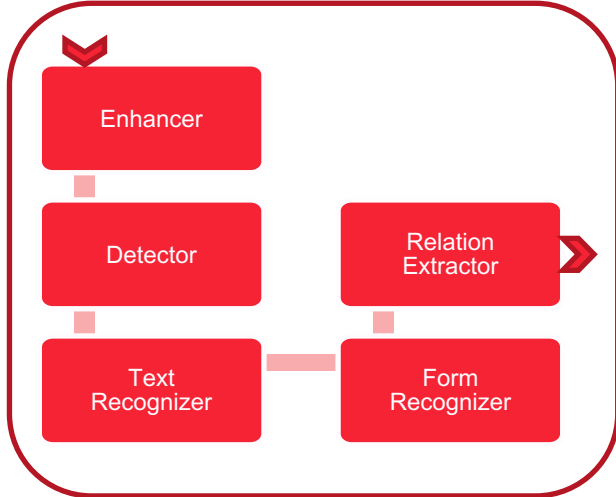Unstructured Data → AI Service Stack → Structured Information

Log-in-Sights

- Network Use Data Analytics
- Subscriber App Use Data /CDR Analytics Support

Value Populator → Anomaly Detector

Parametric Visualizer ← Group Former ← Sequence Realtor

Opinion Ranker → Personalizer

Unstructured Data → AI Service Stack → Structured Information

Form-in-Sights

FloorPlan-in-Sights

Super-Resolution → Room Segmentation → Object Detection → 3D Generation → 3D Object placement → Rendering

| Unstructured Data | AI Service Stack | Structured Information |

PointCloud-in-Sights

Video

Video Processing → Feature Extraction → Object Detection

Depth Estimation | Point Cloud | Floorplan Generation

Camera Parameter Estimation | Mesh Reconstruction | DWG, DXF
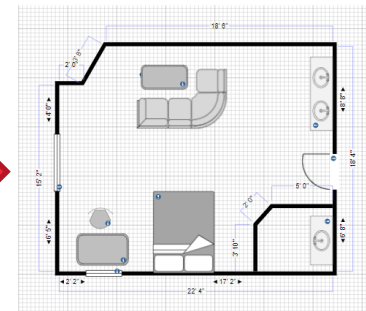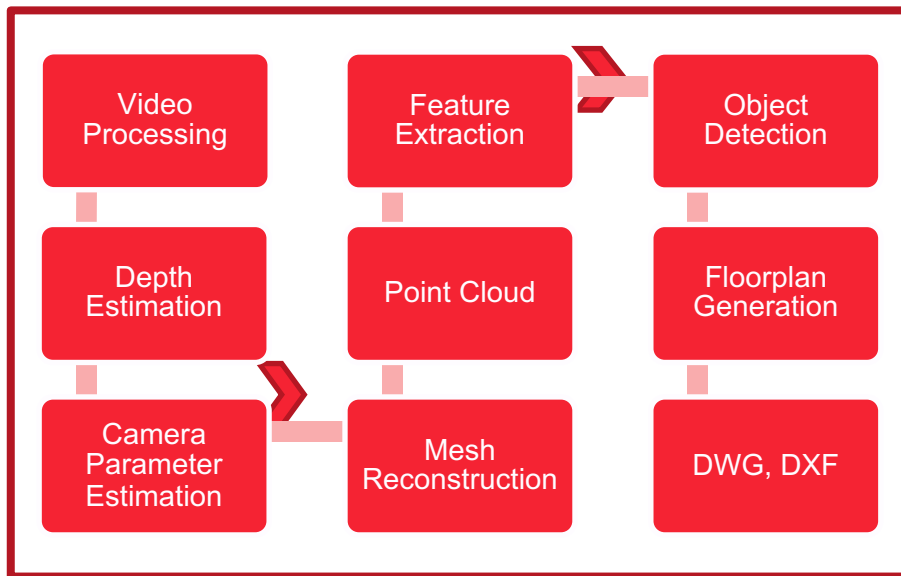
Unstructured Data | AI Service Stack | Structured Information

Data Analytics and Data Science –Domain Knowledge

Domain	Tasks	Applications
Text	Text Classification	Sentiment Analysis, Intent Classification
	Named Entity Recognition & Relation Extraction	Information Extraction, Data Augumentation
	Text Classification, Named Entity Recognition & Relation Extraction	Chatbots, Question Answering systems
	Text to Text	Type a head, Grammer Correction, Decoder for OCR & Speech to Text, Machine Translation
Image	Image Classification	Face , Form layout , Cheque type , Form type identification, Emotion Identification
	Object Segmentation	Separation of floors, Separation of backgrounds
	Object Detection	Geometrical Shape , Machining feature, Number plate, Face Detection, Floor Plan , Pose Estimation
	Image to Text	Handwritten and Printed Text Recognition
	Image to Image	2D to 3D imaging, Video to Point Cloud Convertion
Speech	Speech to Text, Speaker Diarization	Extract text from the speech signals
	Text to Speech	Generate Speech Signal from the text
	Speech Classification	Sentiment and Emotion Recognition, Speaker Recognition, Key Word Spotting
	Speech to Speech	Noise Removal, Voice Cloning
Numeric	Recommendation System	Recommendation Engine
	Visualization	Data Visulaization, Inference Justification, Feature Importance
	Sequence Analysis	Fraud Detection, Anti Money Laundering, Stock Market Prediction, Vibration Analysis

Partial List of Customers

Thank You