



 Leftshift One

#Predictive Quality
Getting AI Things explained



Leftshift One

Introduction

Founded: 2017 in Graz

Offices: Graz (Headquarter), Munich, Zurich & Netherlands (to be opened in 2021)

Staff: 40 Employee with 80 years of AI development experience

AIOS: 100.000 hours of development work

Patrick Ratheiser

CEO

patrick.ratheiser@leftshift.one

Follow Me by LinkedIn

<https://www.linkedin.com/in/patrick-ratheiser-10b10b53/>

Forbes AI 30 DACH



We believe in the positive collaboration of humans and machines

Symbiotic Artificial Intelligence

Leftshift One

*We develop
disruptive
AI Enterprise Solutions
with our Customer*

◀◀ Leftshift One





Predictive Quality

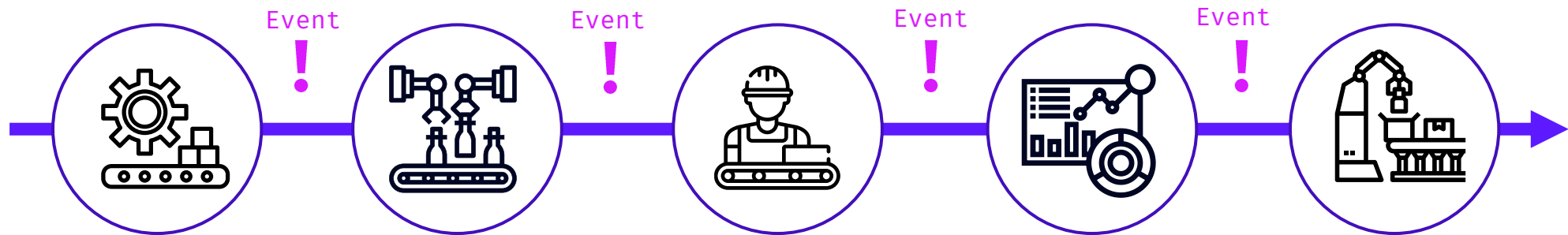


Predictive Quality & Recommendation Engine

0110
1001
1010

Incidents vs Deviations

Machine generated Data



Human generated Data



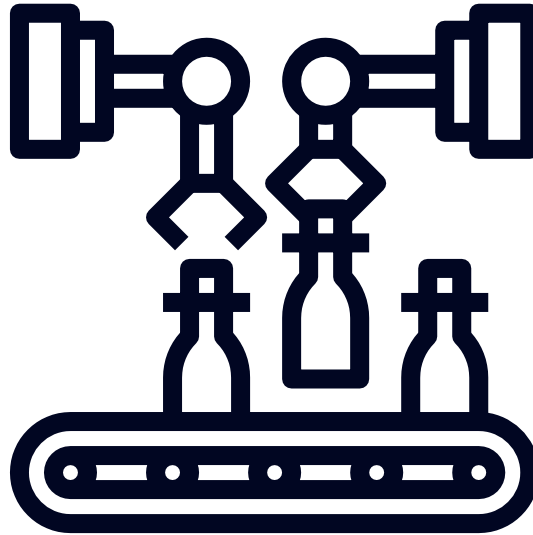
800
Tickets
Month



Machine Data

0110
1001
1010

Machine generated Data



you can only
measure
what you can
measure

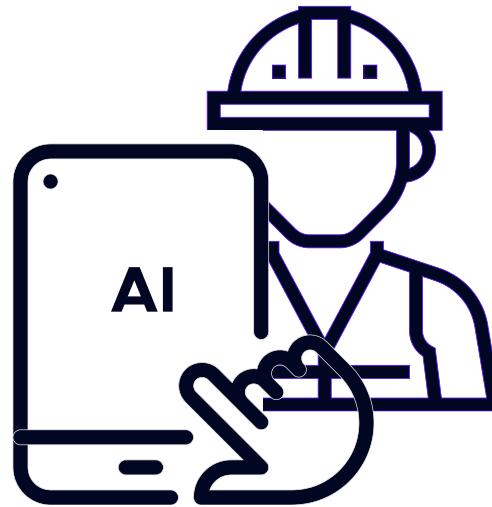
AI: Data Analysis | Time Series Analysis | Anomaly Detection



Human Data



Human generated Data



Operator

Human sensors out of the Box

AI: Natural Language Understanding | Named Entity Recognition | Cluster Analysis

Symbiotic Artificial Intelligence



Leftshift One

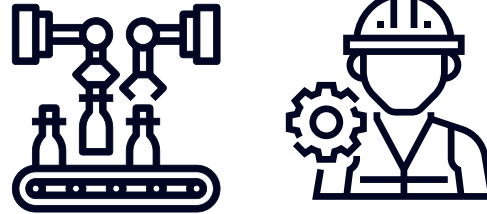


Predictive Quality & Recommendation Engine



15 min

Human



1,5 min

AI and Human

AIOS processes 11.000 tickets per year - 10 times faster than humans



AI Marketplace



Natural Language Understanding & Processing (NLU/NLP)



Sentiment Detection & Summarization



Machine Translation
50+ languages



Big Data and Cluster Analytics



Recommendation & Prediction Engine



Computer Vision for Document & Image recognition



Semantic Search & Knowledge Management



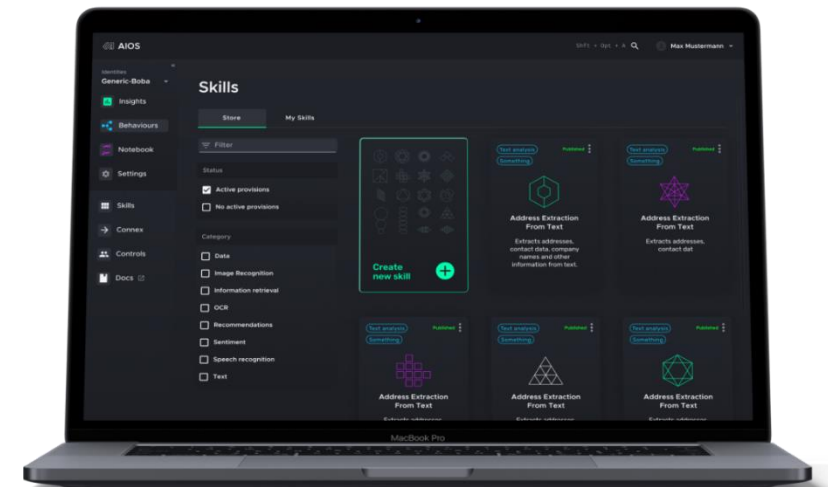
Conversational User Interface

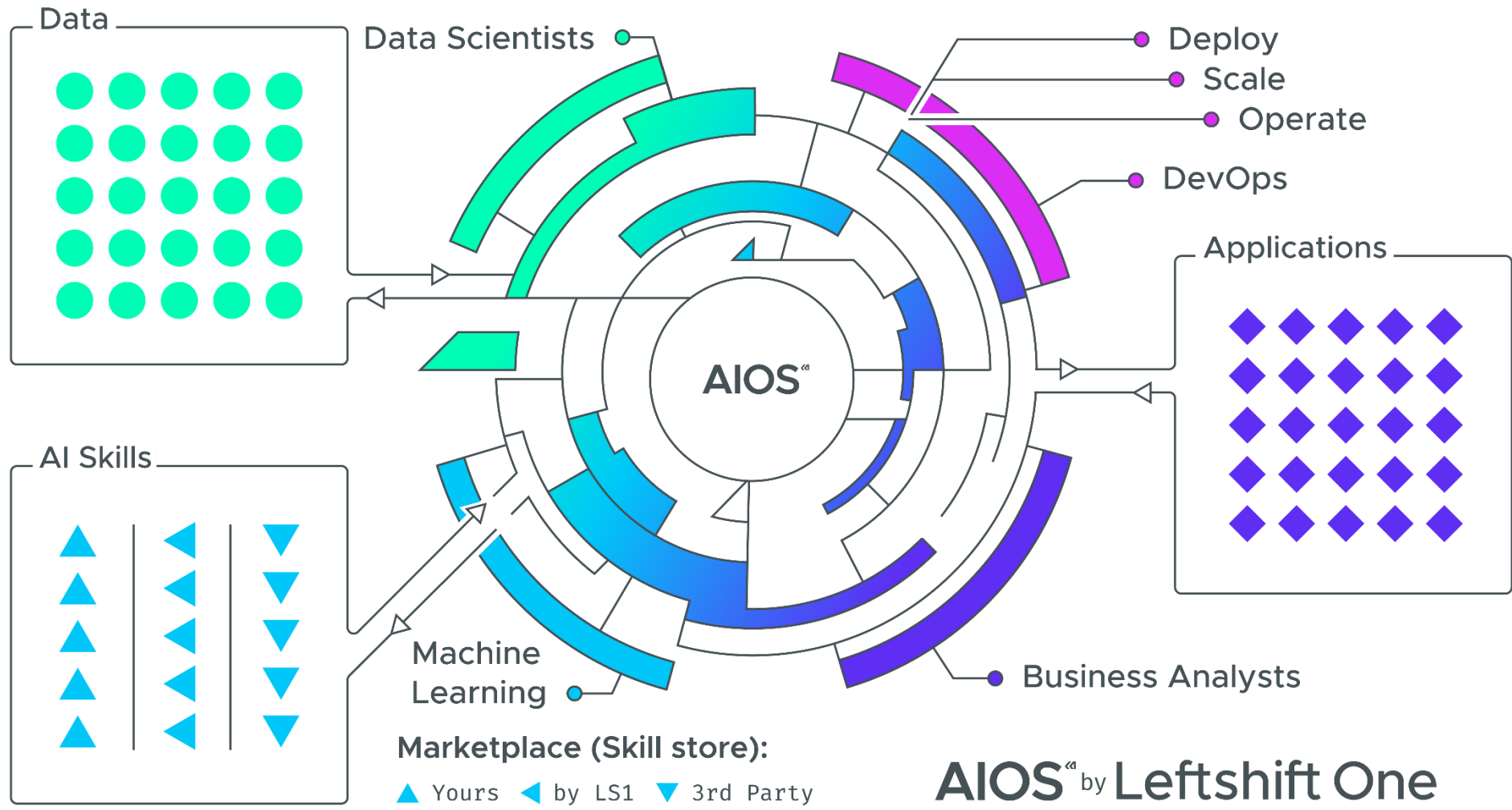


Anonymization/
Synthetition/ Data Augmentation



Time Series & Forecasting

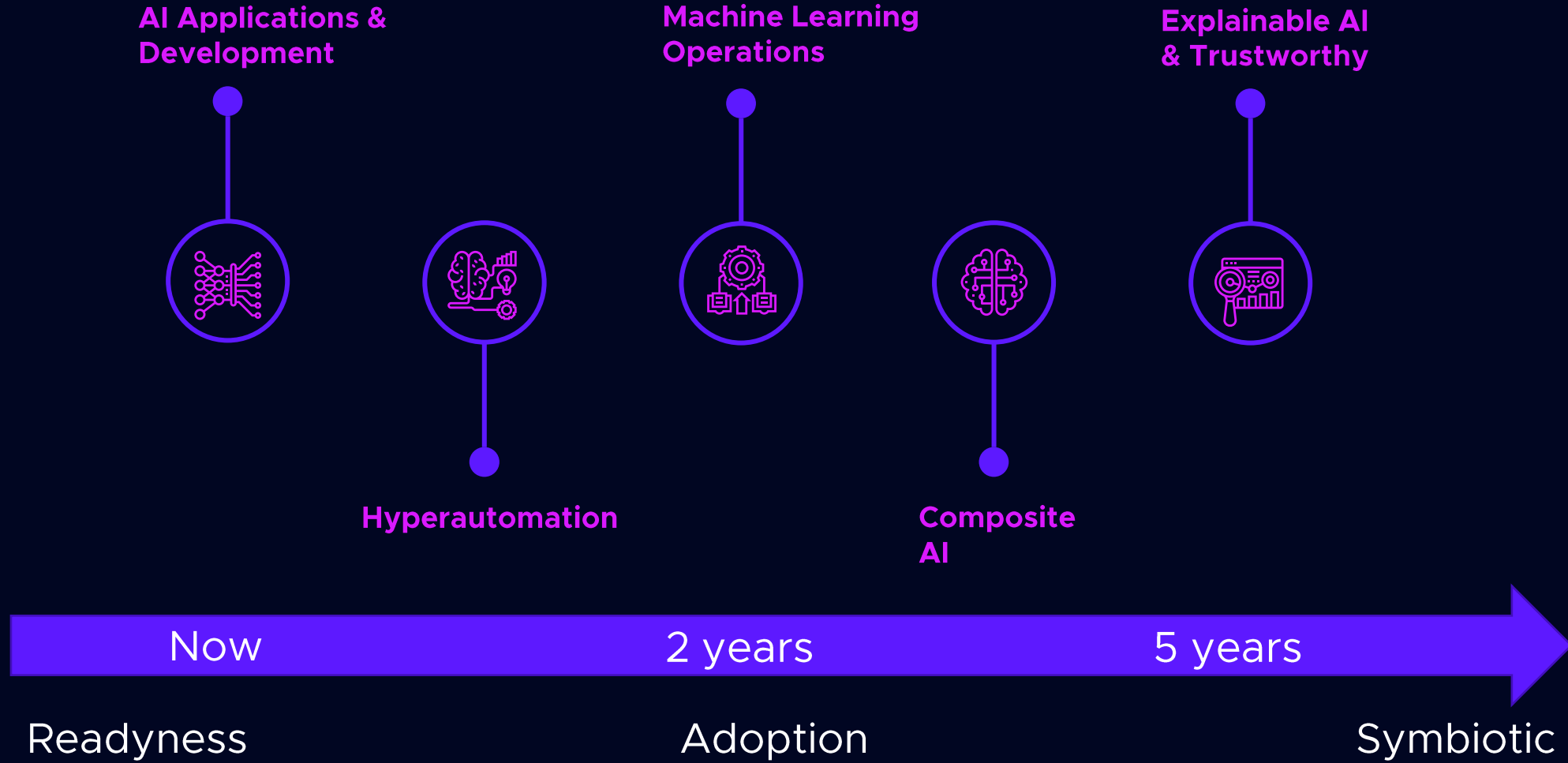




AIOS[™] by Leftshift One



FUTURE PROOF



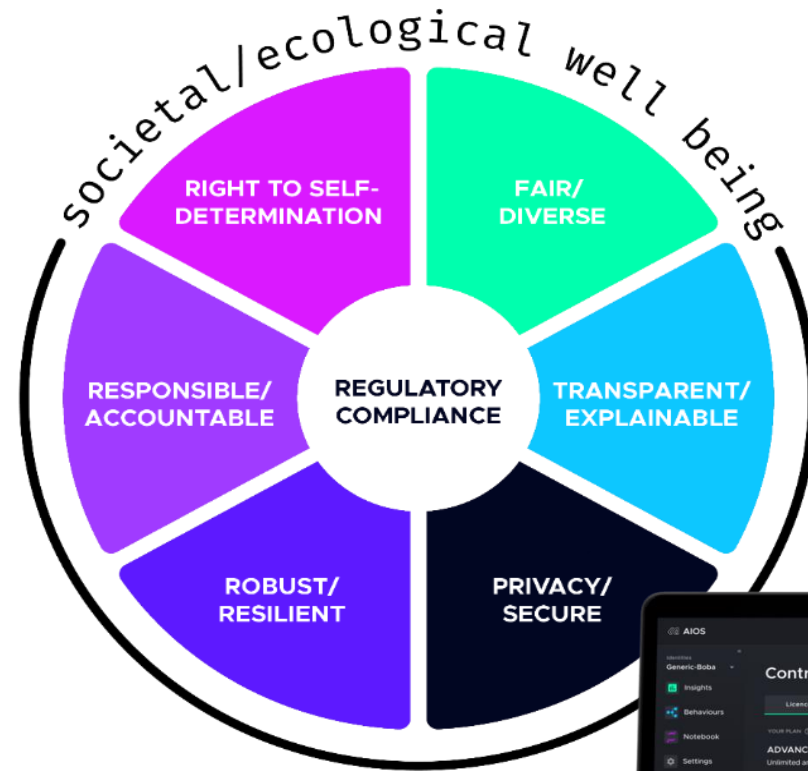


Responsible AI An Imperative!



Responsible AI

- Human in the loop
Human on the loop
- Skill Practice & Evaluation Tracing
- (Ethical) Skill Validation
- Self Explainable Skills
- Reactive manifesto & Actor System



Required to be certified!



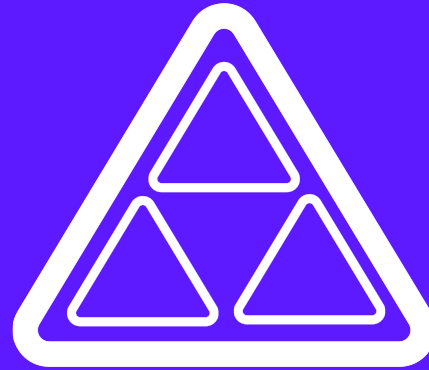


XAI



explain

Validation



validate

Documentation

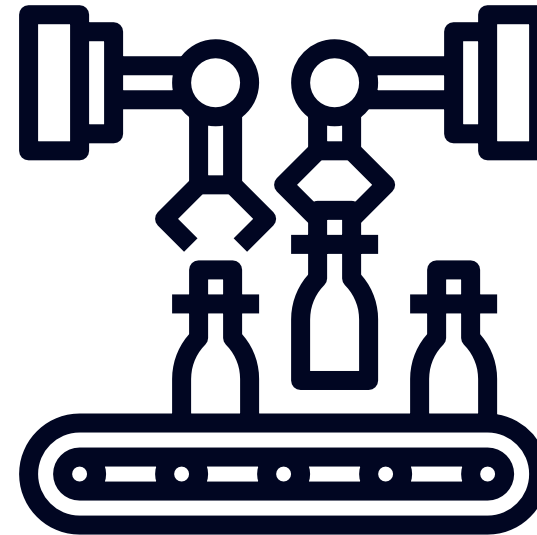


trace



XAI – Machine Data

- #: Quantity
- #: Distribution
- #: Features
- #: Bias
- #: Balance





XAI – Human Data

- #: Text Classification
- #: Text Similarity
- #: Named Entity Recognition
- #: Topic Modeling
- #: Text Summarization



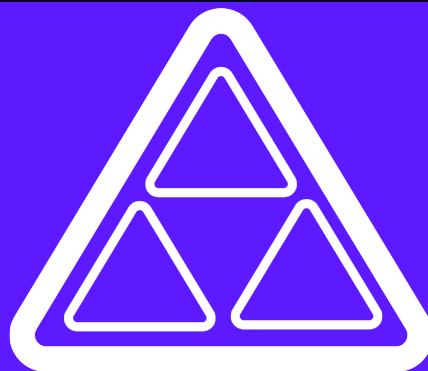


XAI



explain

Validation



validate

Documentation



trace



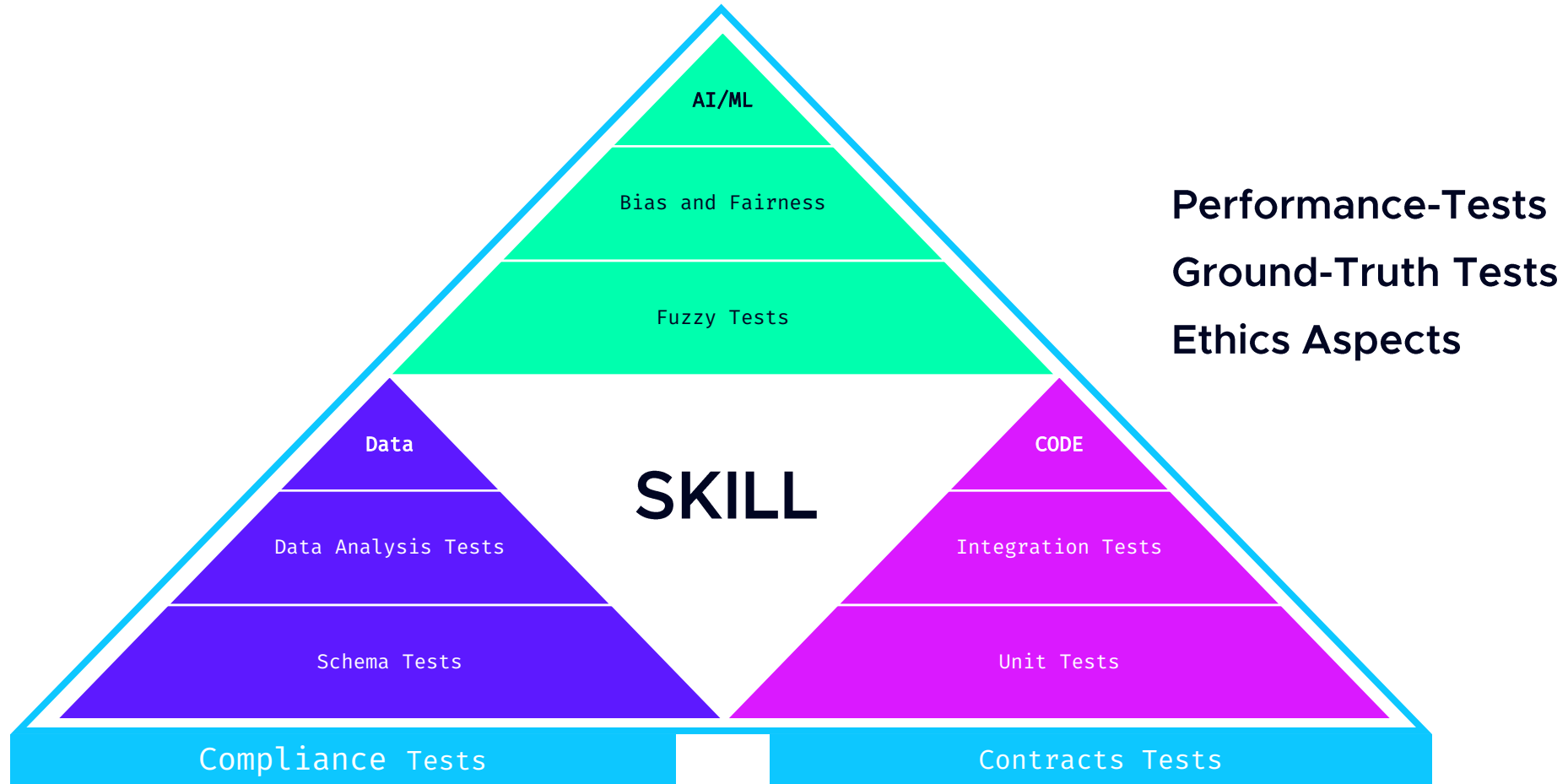
Skill Concept

A skill is the smallest logical unit that generates a business value.



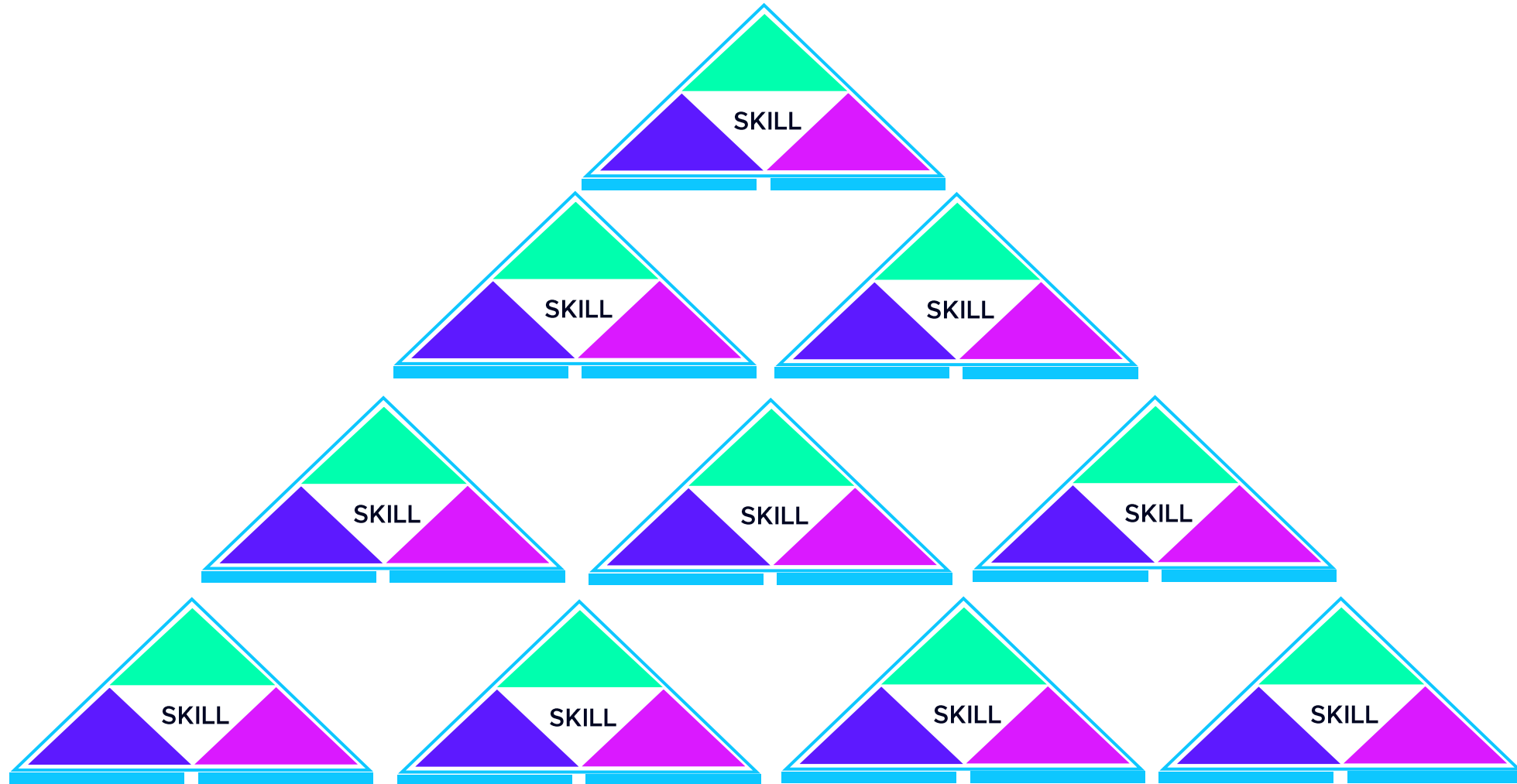


Combine Skill Concept + Test Pyramid





Sierpinski-Triangle Test Pyramid



more than one Skill

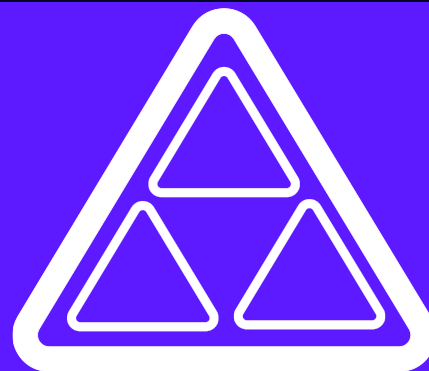


XAI



explain

Validation



validate

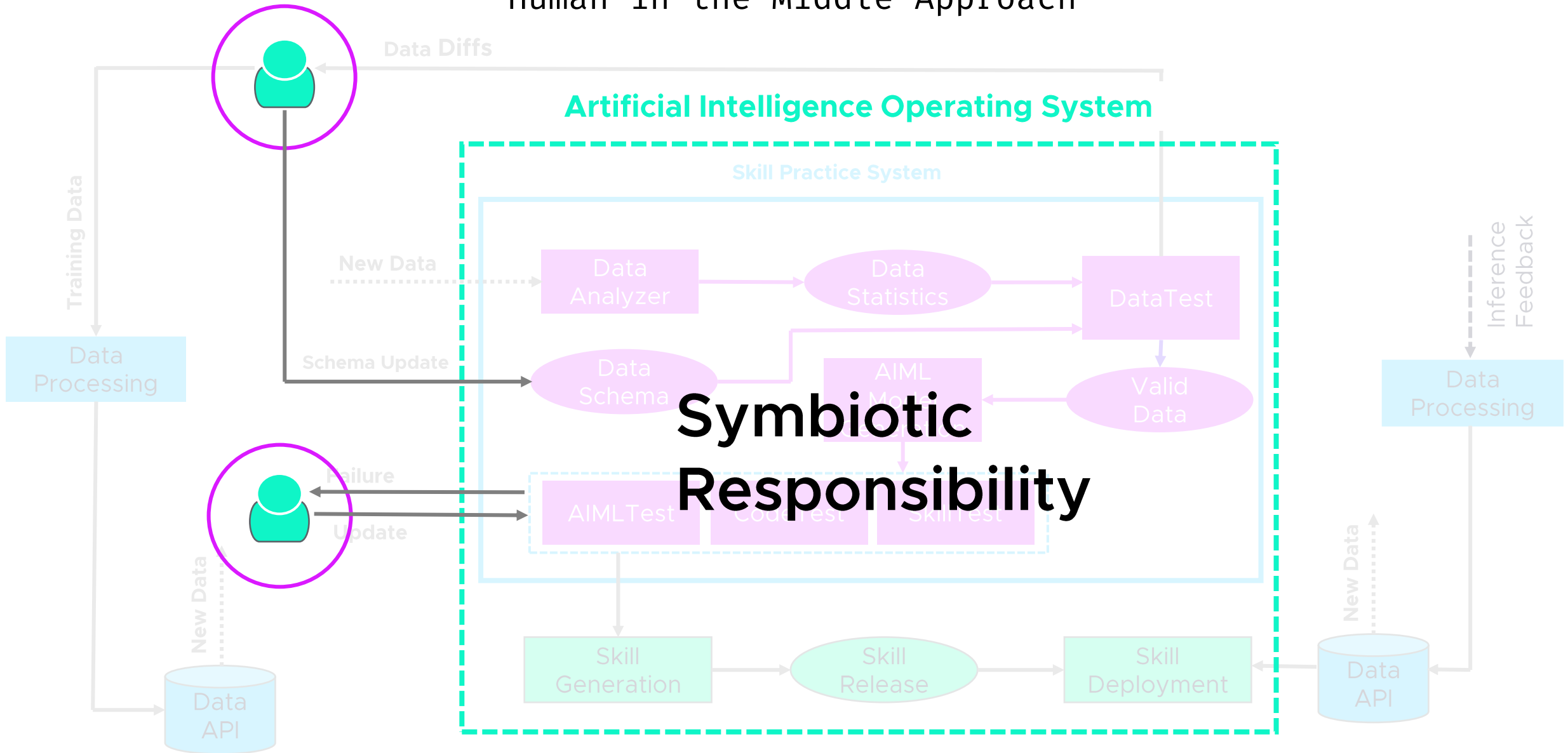
Documentation



trace



Human in the Middle Approach



A detailed, dark blue line-art illustration of a human brain, viewed from a slightly elevated perspective, serving as a background for the central text.

*It's not important what AI
CAN DO, it's important
what AI is
ALLOWED TO DO.*

 Leftshift One