End to End Deep Learning Platform for every Industry

NAOKI TONOOGI
ABEJA SINGAPORE
ABEJA is NVIDIA’s first unlisted investment Asia
AGENDA

1. ABEJA Platform
2. Case Studies
3. Client Benefits
AGENDA

1. ABEJA Platform
2. Case Studies
3. Client Benefit
Deep Learning has been adopted across many industries over the last 5 years
In the near future, all companies will have to use Deep Learning (AI) technology.
However...
Why is the implementation of AI algorithms so difficult?
In order to successfully utilize AI, the creation of the algorithm is just the 1st step.
Three Main Problems to Manage AI

1. **Data Collection/Annotation**
   - Gathering and annotating data is difficult and resource draining

2. **Learning**
   - Model training and debugging is dependent on human skills and experience

3. **Deploy**
   - A lot of investment in infrastructure is required to manage AI.
End to End AI Platform

- Annotation
- Data Handling
- Output Management
- Model Version Management
- Deploy Management

Input Management
Data Lake/Warehouse
BigData Transfer
Device Management

Cyber World
Physical World

Data Output
Calculation
Device Control

Model Inference Management
Edge Monitoring from Cloud

Monitoring

Existing Data

Device Control from Cloud
Key Features of ABEJA Platform

1. Fully-scalable data collection and automatic annotation

2. Automate model management and deployment

3. Fully-managed infrastructure of AI including GPU
1. Fully-scalable data collection and automatic annotation
2. Automate model management and deployment

- Validate accuracy of algorithm
- Control versions of algorithms
- Compare most accurate algorithms
- Convert Web API’s
- Automate Deploy
3. Fully-managed infrastructure of AI including GPU

Auto Scaling
expand or reduce the usage of the infrastructure

Easy Management
Simplify workload and user authority checks
The biggest AI Platform Ecosystem In Japan
AGENDA

1. ABEJA Platform
2. Case Studies
3. Client Benefit
Confidential
AGENDA

1. ABEJA Platform
2. Case Studies
3. Client Benefit
Significant Time & Cost Reduction

**Before**

**Internal Process**

- Set-Up Time
- Data Accumulation
- Data Annotation
- Prototyping
- Training
- Tuning
- Deploy
- Re-learning

**After**

- Set-Up Time
- Data Accumulation
- Data Annotation
- Prototyping
- Training
- Tuning
- Deploy
- Re-learning
Improve your AI algorithms by managing efficiently.
Clients can focus on their core business and make innovation
Supporting all industries to overcome their AI obstacles, worldwide
The AI Revolution Accelerated

2018/2/22
@Japan/Tokyo
Innovation that changes the world