

AIMESoft COMPANY PROFILE

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**TRANSFORM YOUR
BUSINESS WITH
THE POWER OF
MULTIMODAL AI**

AIMESoft JOINT STOCK COMPANY (AIMESoft JSC.)

Address: 3F, Hoang Ngoc Building, No. 4,
Ln. 82 Dich Vong Hau Street, Hanoi, Vietnam

Website: <http://www.aimesoft.com>

Phone: +84 98-538-7426

Email: info@aimesoft.com

WWW.AIMESoft.COM

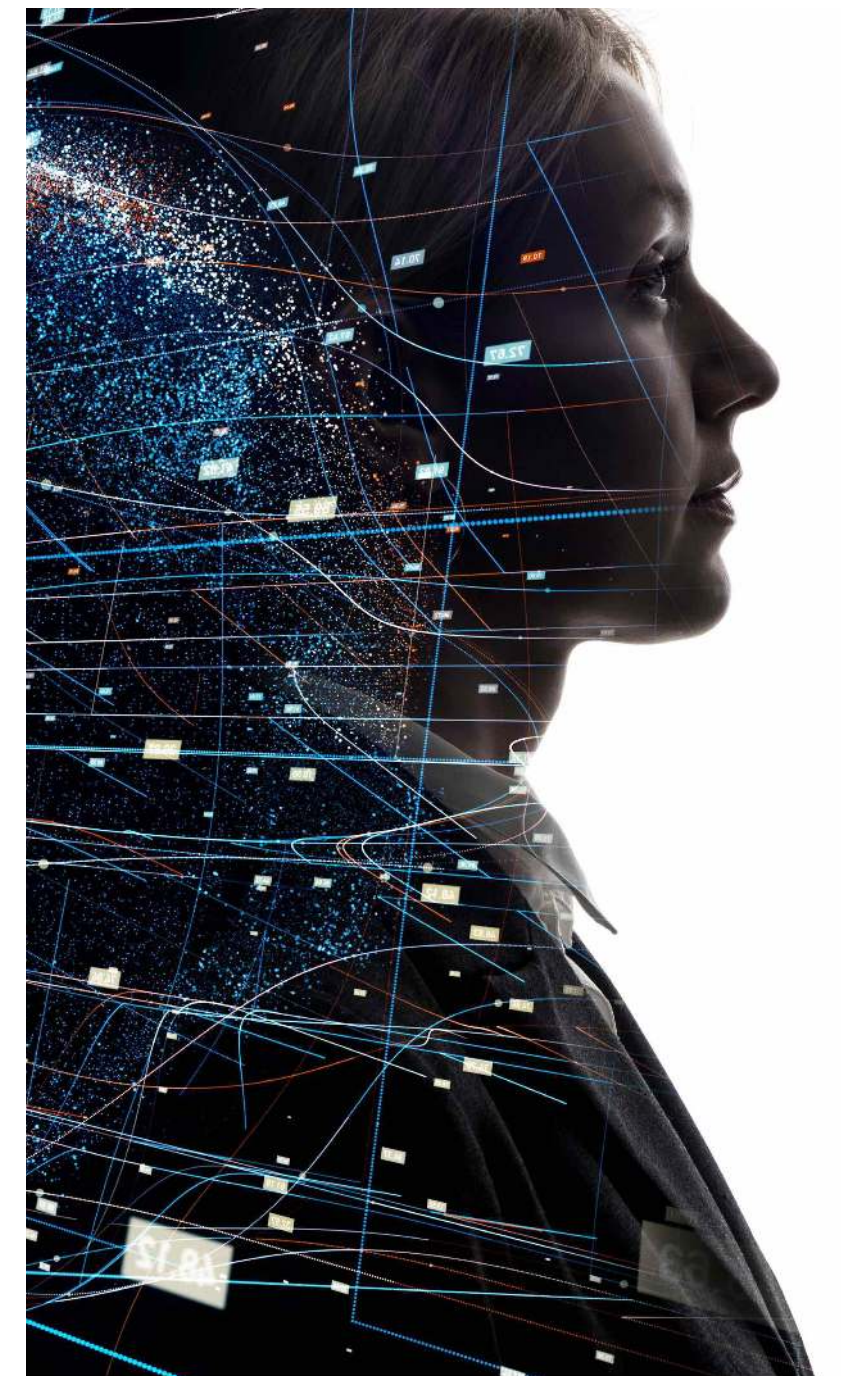


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MESSAGE FROM THE BOARD

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Established in 2018, Aimesoft has defined our vision to become a leading company in providing AI services and solutions to the global market.

Our mission is to constantly innovate and develop advanced technologies to consult and provide AI-powered solutions for both domestic and overseas enterprises.

What makes us unique is our Multimodal AI ecosystem, conducted and developed by AI professionals in Aimesoft. This model is a combination of multiple input sources and various intelligence algorithms into a single system. With this initiative, we are confident to bring the latest and most impressive AI technologies to the global market.

We aspire to be the best partner with our customers by accelerating their success through our technology services and solutions. Aimesoft is committed to constantly innovating to create breakthrough products that are highly applicable in daily lives.

CEO
Dr. Nguyen Tuan Duc



Dr. Nguyen Tuan Duc

Ph.D in Information Science and Technology [The Univ. of Tokyo]

Roles before Aimesoft CEO:

DeNA Co., Ltd. (Japan)

Data scientist

CyberAgent Inc. (Japan)

Senior AI Researcher [Founding member of CyberAgent AI Lab]

Awards:

JSAI 2010 Conference Award [PI]

Google Research Award Winter 2010, PI:
Prof. Mitsuru Ishizuka

Microsoft CORE Grant 2011, PI : Dr.
Danushka Bollegala

ABOUT US



Aimesoft is an AI product and solution development company focusing on Multimodal AI. Our Multimodal AI combines various input data sources such as texts, images, and speech data with intelligence processing algorithms to achieve impressive outcomes in real-world problems.

The history of Aimesoft dates back to 2007, when its founder and CEO, Dr. Nguyen Tuan Duc, started his research on Distributed AI and Natural Language Processing.





ACHIEVEMENT



**Built the World's
first Multimodal AI
software ecosystem
(Aimenicorn)**



**Invented Aimesoft
Multimodal AI paradigm**



**More than 200
Multimodal AI real-
world applications/
solutions for various
clients in Japan, UK, US**

MILESTONES

2018



2018/2 Aimesoft JSC establishment

2018/2 Multimodal AI research and development

2018/5 AimeFluent system development

2019



2019/2 AimeCard, AimeFace product development.

2019/5 Aimesoft USA (Aimesoft Inc.) establishment, expanding to the US market

2019/10 Aimenicorn ecosystem realization.

2020



2020/2 : AimeFace Japanese patient registration

2020/4 : Expands business to Korean market

Company name: Aimesoft Joint Stock Company (Aimesoft JSC.)

Business Field: Multimodal AI solution provider

Address: 3F, Hoang Ngoc building, No. 4, Ln. 82 Dich Vong Hau Street, Hanoi, Vietnam





AIMENICORN MULTIMODAL AI ECOSYSTEM

Multimodal AI combines multiple input sources (text, voice, image, numerical data, etc) and various intelligence algorithms into a single system to solve complicated problems and achieve high performance. These problems often cannot be solved with a single input source or a single processing algorithm.



AIMENICORN

AimeFluent
(NLU Platform)

AimeCard

Aimelytics



AimeFace
(Face Recognition)

AimeStats

Aime Speech

Aimenicorn is a Multimodal AI ecosystem developed by Aimesoft to simplify the process of applying Multimodal AI technologies in various industries by providing Multimodal AI software packages.

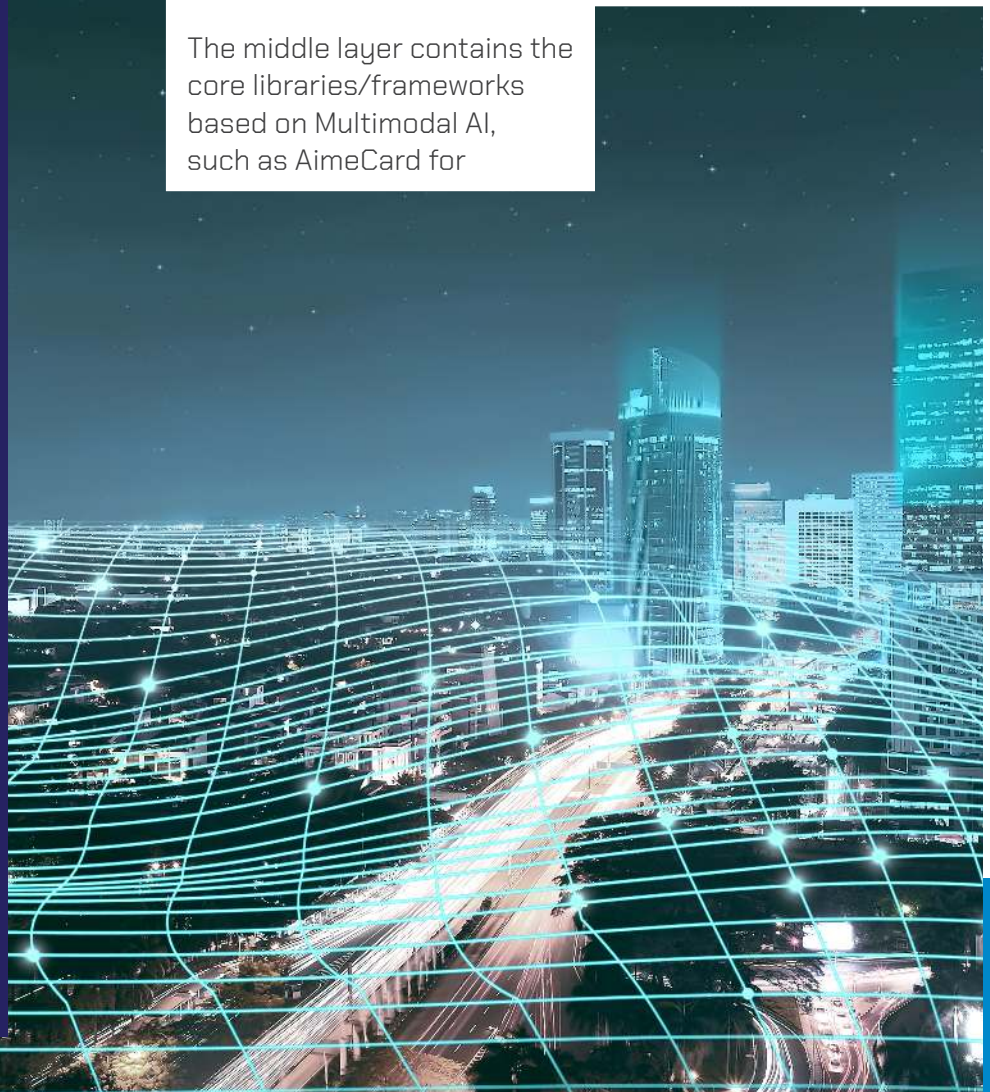
Aimenicorn contains three main layers:

The bottom layer is the Multimodal AI framework, which provides complicated data fusion algorithms and machine learning/ inference technologies.

The middle layer contains the core libraries/frameworks based on Multimodal AI, such as AimeCard for

structure analysis and understanding by OCR, AimeFace for face recognition technologies, etc.

The top layer contains various applications for small domains, which combine cutting edge Multimodal AI technologies with deep domain knowledge to yield impressive user experience. AimeHotel, AimeHospital, AimeBank, Aime AShop are some of these applications.



OUR SERVICES & SOLUTIONS

At Aimesoft, we provide end-to-end Multimodal AI integrated solutions across a wide range of industries such as Healthcare, Hospitality, Transportation, etc. In addition to developing AI-powered products, we provide consulting services to enable companies to understand, evaluate and adopt Artificial Intelligence. With a team of dedicated and leading AI experts, we have assisted numerous enterprises to achieve breakthroughs in their development journey





AI CONSULTING

OUR APPROACH TO AI CONSULTING

- Discover and understand the insights
- Give advisory
- Provide solutions & Analysis
- Production
- Evaluation & Support

AI PRODUCTS

KEY EXPERTISES: MULTIMODAL AI

- Speech Processing
- Natural Language Processing
- Text Mining
- Big Data
- Data mining

PRODUCTS & SOLUTIONS

- AimeHotel
- AimeReception
- AimeCard
- AimeAlshop
- AimeStats
- AimeSpeech
- AimeHospital
- AimeFluent
- AimeFace
- Aimealytics



AI CONSULTING SERVICE

TRANSFORM YOUR BUSINESS WITH THE POWER OF ARTIFICIAL INTELLIGENCE

We have a team of AI consulting experts and data scientists who dedicate to innovating breakthrough solutions to make your business to the next level.

APPROACH TO AI CONSULTING

01



02

DISCOVER AND UNDERSTAND THE INSIGHTS

- AI Technology guidance, showcase
- Discover potential AI solutions for the client
- Evaluate customer needs
- Evaluate existing business processes, workflow, data, infrastructure, ...
- Evaluate applicable AI technologies

GIVE ADVISORY

- AI strategy formulation advice
- AI Solution proposal
- Implementation planning
- Data collection, annotation workflow definition



03

PROVIDE SOLUTIONS & ANALYSIS (POC)

- Provide solutions to bring improvements
 - Data collection, annotation, analysis
 - AI model/algorithm research, development, experiment
 - AI model performance/accuracy evaluation
 - System integration
 - Integration testing
 - Infrastructure, network, security evaluation
- Potential business impact evaluation, analysis, report

04

PRODUCTION

- Go-live strategy advice
- Deploy and launch the system
 - Infrastructure selection
 - Load balancing
 - Security
- Performance monitoring
- User guide, manual

05

EVALUATION & SUPPORT

- Business impact evaluation, analysis, report
- Chance management
- System maintenance, improvement
- Gather feedback & support
- Technology transfer

AimeHotel



Aimehotel is a product developed to meet the high demands of customers during their stay at the hotel. This Multimodal AI-powered product combines various data resources (text, voice, photos, data) and smart processing algorithms.

FEATURES

- Facial recognition, auto-greeting and customer's information remembering
- Suggestions for hotel's service and information
- Customer data statistics, user services personalization
- New knowledge enabling to improve the hotel's virtual staff intelligence
- Scalable software: Integrating a 3rd party server.

AimeReception



Aimereception is a virtual receptionist developed based on Aimesoft's Multi-modal AI. This product can replace human receptionists on several reception operations such as guest welcoming or information offering. Available for customers 24/7, it works at your customer's convenience.

FEATURES

- Welcome guests
- Introduce company information, products, and services
- Allow customers to book an appointment directly
- Check time attendance by facial recognition
- Do customer data statistics
- Record reception area
- Integrate third-party services
- Update knowledge and enhance intelligence.
- Connect to the administrator when needed

AimeAI Shop



AimeAIshop is a Multimodal AI-powered solution that can automatically recognize images, voices, and languages to support customers in stores or supermarkets.

FEATURES

- Automatically providing information about the store
- Automatically providing information on items displayed in the store
- Automatically suggesting suitable items for buyers
- Automatically giving prices for buyers
- Auto-bargaining

AimeHospital



AimeHospital is a smart healthcare solution that can analyze medical records based on Multimodal AI. It helps hospitals to improve the quality of medical examination and treatment

FEATURES

- Automatically reading and analyzing medical records to give a summary of disease progression and treatment process
- Automatically identifying drug names, disease names, and drug side effects.
Auto-save medical records by listening to the words
- Diagnose with the disease by symptoms
- Find the connection between diseases
- Creating electronic medical records"

AimeCard



AimeCard is a software program that uses Smart OCR technology. It can deliver highly accurate character recognition such as text, structure, the content of invoices, documents, identity cards, insurance cards, etc

FEATURES

- ID and identification papers recognition
- Driving license and passport recognition
- Invoices and documents recognition



Aimelytics

FEATURES

- Predicting the value of the real estate and old assets
- Analyzing security forecasts
- Predicting electricity and petrol prices and consumption
- Listening to SNS, WWW (Facebook news...) and analyzing consumer behavior
- Making credit forecast & Bitcoin forecast
- Credit Scoring



AimeStats

AimeStats is a counting and statistic program

FEATURES

- Counting the number of customers in the store
- Counting the number of cars and identifying car types
- Checking the duration and location of car parking
- Collecting and extracting important keywords, counting the number of important words in a sentence

SMART CENSORSHIP

- Censoring music copyright
- Censoring inappropriate images
- Censoring inappropriate subtitles
- Censoring violent sounds

SMART TRANSPORTATION

- Vehicle recognition
- Vehicle license plate detection
- Vehicle speed control
- Vehicle traffic counting
- API-integrated traffic monitoring system



AimeFluent

AimeFluent is an automated customer service. It can be applied in customer services in different fields such as consulting, finance - banking, education, tourism, e-commerce, law, etc. AimeFluent allows humans to interfere while answering if needed

FEATURES

- Diverse and flexible back-and-forth conversation
- Ability to remember the context, conversation history, and customer information
- Support questions that need the ability to extract and interpret user information
- Assistance in integrated, flexible, third-party answering API calls
Ability to improve intelligence, teach bots
Diverse integration on the website, app, automatic email, automatic switchboard, social networks [Facebook, Zalo, etc.]

Smart eye-wear solutions



This smart device is made based on Multimodal AI and applied computer vision technology to recognize objects, texts, and signals. Data transmitted through the device is processed and transformed into speech.

FEATURES

- Read texts automatically
- Detect objects recognition
- Identify traffic signals and obstacles
- Support blind people to cross the street



Smart currency solutions

FEATURES

- Predicting the value of the real estate and old assets
- Analyzing security forecasts
- Predicting electricity and petrol prices and consumption
- Listening to SNS, WWW (Facebook news...) and analyzing consumer behavior
- Making credit forecast & Bitcoin forecast
Credit Scoring"



OUR CUSTOMER

HSBC 

 **TNG**


Hãy nói theo cách của bạn

HITACHI
Inspire the Next

9h
nine hours

 **JCM**
GLOBAL

 **TOKUSHUKAI**
INFORMATION
SYSTEM

薄毛の悩みをもっと身近に
 **SPJ**
Scalp Pigmentation Japan


NEXUS
FRONTIERTECH

ENTSU
DIGITAL

WIDER PLANET 

 **SoftBank**

GS SHOP



TOSHIBA

FUJI XEROX 

WHY US



1.

EFFICIENT SOLUTIONS

We offer practical and cutting-edge solutions which allow businesses to address their limitations and achieve breakthroughs

TOP-CLASS AI RESEARCH & DEVELOPMENT MEMBERS



2.

PROFOUND EXPERTISE IN AI DEVELOPMENT

Aimesoft has profound expertise in AI development and solutions for a wide range of business domains.

3.

KNOW-HOW

Over the development, we have built a strong team with dedicated AI professionals, highly-skilled developers and experienced technical support staff who will bring the most satisfying services to customers.



CASE STUDIES







HEALTHCARE

VIRTUAL AI DOCTOR, VIRTUAL HOSPITAL STAFF AIMEHOSPITAL

Virtual Hospital Staff software system, AimeHospital includes virtual AI doctors, nurses, and pharmacists. It can automatically analyze conversations with patients, recommend the right medicine, check prescriptions to find abnormalities, guide patients through a hospital, work as a pill reminder and etc.

TECHNOLOGIES

Aimesoft Multimodal AI technology, facial recognition, electronic medical record text analysis and understanding by natural language processing [NLP], drug description text analysis, patient conversation understanding, drug description vs. patient conversational text matching, dialogue generator,

voice activity detection [VAD], speech recognition, speech synthesis

BENEFITS

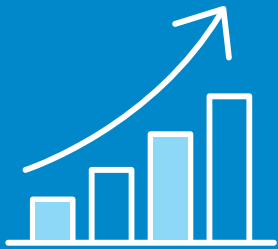
Help human doctors verify prescriptions, remind the doctors about possible abnormalities in the prescriptions, improve the safety and correctness of the prescriptions.

Reduce human involvement in hospital guidance, reception, automatic medical examination recording

RESULTS

Applied in several hospitals in Japan and Vietnam

Achieved a success rate in reception and hospital guidance of 88% and reduced 50% of employee cost “



FINANCE

SMART BANKNOTE PROCESSING

AI solutions for Banknote processing devices. The solution helps the devices to automatically recognize banknote type, amount [denomination], serial number, counterfeit banknote, stolen banknote etc.

TECHNOLOGIES

OCR, CRNN, Support Vector Machine (SVM), k-NN [k-nearest neighbors], Bradley binarization, MB-LBP [Multi-Block Local Binary Pattern], Wavelet Transformation, etc.

BENEFITS

Automatically recognize types of banknotes, count and aggregate the amount
Automatically verify the validity of banknote

RESULTS

Used in several devices of JCM [Japan Cash Machines]
Contribute to the success of JCM in dominating banknote acceptor market in Las Vegas, USA



BANKING

VIRTUAL AI BANK STAFF AIMEBANK

A Virtual Bank staff product named AimeBank is a Multimodal AI solution for banks. It helps banks to automate various tasks, such as customer support, reception, automatic credit scoring, forex/stock prediction.

TECHNOLOGIES

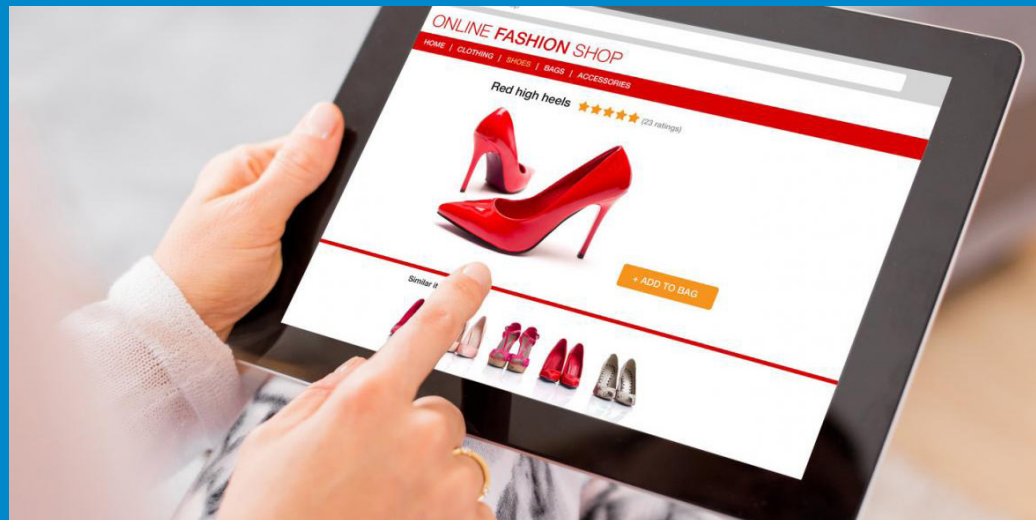
Aimesoft Multimodal AI technology, facial recognition, voice activity detection (VAD), speech recognition, speech synthesis, natural language understanding, dialogue generation, linear regression, logistic regression, support vector regression, LSTM (long short-term memory network)

BENEFITS

Credit scoring with over 80% accuracy and allow banks to evaluate the safety of loans
Reduce employee cost in customer support and reception

RESULTS

Forex system actually yielded interests, stock prediction algorithm used by a large platform
Automated customer support for a big bank in Vietnam"



E-COMMERCE

VIRTUAL SHOP STAFF AIME AISHOP

A Virtual shop staff product named Aime AIShop is an application of Multimodal AI in e-commerce/retail. It helps retail stores to count the number of customers, recognize repeaters, security the shop with surveillance and automatically guide customers by answering questions about price, size, and other product information in both real and online shops. Aime AIShop is also capable of recommending products and optimizing online shopping to improve purchase/conversion rates.

TECHNOLOGIES

Aimesoft Multimodal AI technology, human detection (by YOLO3), object recognition and instance segmentation

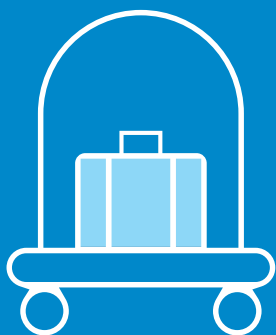
(Masked RCNN), facial recognition, data mining technologies (collaborative filtering, matrix factorization, long short-term memory network (LSTM), natural language understanding, dialogue generation, speech recognition, speech synthesis.

BENEFITS

- Improve the purchase rate
- Recommend product recommendation for customers, and improve revenues
- Cut cost of human operations

RESULTS

Deployed in a retail store in Japan and other online shops
Applied in Meat Deli (Masan's stores) in Vietnam"



HOSPITALITY

VIRTUAL HOTEL STAFF AIMEHOTEL

AimeHotel is a virtual hotel staff system for hotel automation. It automates various functions of a hotel, such as check-in, check out, customer relation, customer personalization, automatic food/drink order processing [virtual waiter], swimming pool surveillance and etc.

TECHNOLOGIES

Multimodal AI technology, facial recognition, human detection, pose detection, activity detection, OCR (passport/ID card recognition), face comparison (between passport photos and real faces), face spoofing detection, dialogue engine, speech recognition/synthesis

BENEFITS

Automates various activities in hotels to improve user experience
Cut about 35% cost

RESULTS

Applied in a hotel chain in Japan
Applied in TNG group (Sojo hotel) in Vietnam



INSURANCE

HEALTH CHECKUP RESULTS, INSURANCE CARDS ANALYSIS BY AIMECARD

AimeCard is a smart OCR (optical character recognition) platform in Aimenicorn. AimeCard provides various card reading and analysis features such as passport reading, passport face comparison (face spoofing detection), ID card, insurance card, health checkup result reading and analysis.

TECHNOLOGIES

Smart OCR, SVM (support vector machine), CNN (convolutional neural network), C-RNN (character recurrent neural network), spelling correction, document structure analysis, facial recognition, face spoofing detection.

BENEFITS

Automate a large portion of human tasks

Enable insurance agencies to process a huge number of profiles

RESULTS

Applied in a big insurance company in Japan

Deployed for TNG group



FOOD & BEVERAGE

AUTOMATIC MENU CREATOR

Automatically create appropriate menus for users. The AI algorithm automatically analyzes photos of meals in the past to understand the trends to recommend similar menus for a whole week. Other individual diet specialization such as the amount of rice, noodles, and vegetables can also be satisfied.

TECHNOLOGIES

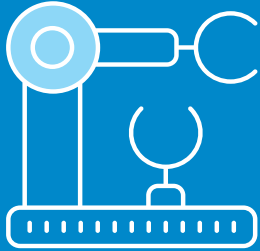
Food image recognition, ingredient recognition, mathematical optimization, integer linear programming, operational research.

BENEFITS

Create delicious meals, without repeating a meal

RESULTS

Used by a hospital food provider in Japan



MANUFACTURING

Product abnormality detection
Automatically detect abnormalities in assembly lines by automated product defect-recognition algorithm. The algorithm is based on CNN [convolutional neural network]

TECHNOLOGIES

CNN, Bradley binarization, shape recognition

BENEFITS

Reduce the ratio of defects in products
Reduce the human cost

RESULTS

Applied in a valve assembly line, reduced the ratio of defect"



TRANSPORTATION

CAR SPEED RECOGNITION, NUMBER PLATE RECOGNITION, SMART PARKING SPACE WITH AIMESTATS

AimeStats is an AI engine for counting the number of cars, humans, parking slots, etc. It can then summarize the results to get meaningful statistical data.

Technologies : car detection, human detection, YOLO, SSD (Single Shot Detector), OCR, space mapping, distance detection.

BENEFITS

Smart parking space : automated surveillance of cars, humans in parking space; count the number car, get statistics about the parking slots (occupied, empty time ...)

Automated highway toll fee calculation

RESULTS

Applied in various parking spaces in Japan and Vietnam



TELECOMMUNICATION

CELL PHONE LOCATION PREDICTION WITHOUT GPS

Base on some devices with GPS on, predict the location of the nearby devices with GPS off, using cell ID and signal intensity information. Achieved the precision of 80% devices with location error less than 100m

TECHNOLOGIES

K-NN, time-series analysis, logistic regression

BENEFITS

Location prediction without GPS, saving energy, keep the battery time longer

RESULTS

Achieved the precision of 80% with location prediction error less than 100m
Applied by SoftBank in their products



LEGAL

AUTOMATICALLY SUMMARIZE LEGAL DOCUMENTS

Analyzes legal documents to extract useful information [attributes] such as articles, sections, scope, subject, duties, period, etc and the relationships between these items.

TECHNOLOGIES

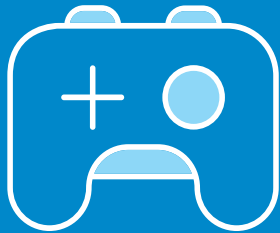
Named entity recognition [NER], LSTM, keyword extraction, relation extraction

BENEFITS

Automatically analyzes legal documents, visualize the laws for easy to understand

RESULTS

Actually summarized and visualized of law articles/sections



ENTERTAINMENT

GAME PLAYING AGENT

Intelligent virtual agent software that can automatically play games with the user. The agent can actually “see” and understand the game screens. It thinks about the strategies and co-operate with the user in playing the game.

TECHNOLOGIES

Object recognition, YOLO3, SSD, optical flow analysis, alpha-beta pruning, optimization

BENEFITS

A multi-player game can be played with a single user the agents

RESULTS

Shown in Tokyo Gameshow 2019, got various positive feedbacks”