

**ABSTRACT PROCEEDING**

**Volume 1, Issue 6**



**MAIE-NOV-2019**

**Venue: Rome, Italy**

**Date: November 25-26, 2019**



**Association of  
Engineering Technology  
& Applied Sciences**

# **AETA International Conference on Machine Learning, Applied Sciences, Information Technology, Artificial Intelligence & Engineering (MAIE)**

Conference organized by:



Association of Engineering Technology & Applied Sciences (AETA) aims to provide a forum for researchers, practitioners, and professionals from the industry, academia and government to discourse on research and development, professional practice in engineering technology and applied sciences..

#### **Mission, Innovative Features & Ethics and Values**

AETA is an organization aims to provide a platform to innovative academicians and researchers around the globe. The organization also encourages research activities by organizing research training workshops, conferences and publishing high quality research manuscripts in reputable international journals.

AETA is a dedicated platform to promote and encourage the latest advancements in Science, Engineering Technology & Applied Sciences for the betterment of human development.

We are passionate about discovering new ways to create value for our members and society. Driven by intellectual curiosity, we promote a culture of invention among all our delegates.

#### **Membership, Conference, Publishing, and Research Information**

Abstracts of the registered participants will be published in the conference abstract book with an ISBN.

mail: [info@association-eta.com](mailto:info@association-eta.com)

Web site: <https://association-eta.com/>

## **AETA International Conference on Machine Learning, Applied Sciences, Information Technology, Artificial Intelligence & Engineering (MAIE)**

### **Table of content**

Welcome Message . . . . .	5
Scientific Committee . . . . .	6
Engineering & Technology Studies . . . . .	7
Conference Schedule . . . . .	9
Conference Abstracts . . . . .	12
Development of A Hybrid Real Estate Recommender System . . . . .	13
Method for Displaying CCTV Heading on the Map in Existing Video Management System . . . . .	14
Upcoming Events . . . . .	15

## Welcome Message

AETA International Conference on Machine Learning, Applied Sciences, Information Technology, Artificial Intelligence & Engineering (MAIE)

We are happy you decided to join your colleagues from around the world to explore innovative technologies, pioneering pedagogical strategies, and a sampling of international collaborations that are being used to engage and retain students, researchers and Scholars in the new millennium.

## Scientific Committee

Prof. Kaninda Musumbu, LaBRI , Universite Bordeaux 1, France

Prof. Figueira, F. M. Monteiro, ULHT - Universidade Lusofona, Portugal

Dr. Ahmad Fairuz Bin Omar, School of Physics, University Science Malaysia, Malaysia

Dr. Le Hoang Son, Hanoi University of Science, Viet Nam National University, Vietnam

Dr. Emil Pricop, Petroleum-Gas University of Ploiesti, Romania

Prof. Viacheslav Pshikhov, Southern Federal University, Russian

Prof. Chomtip Pornpanomchai, Faculty of Information and Communication Technology, Mahidol University, Thailand

Prof. Anjiah Devineni, Manipal University, India

Prof. Dong-Chul Park, Myong Ji University, Korea Prof. Mohamed Ben Haj Frej, POST University, USA

Abdulrhman.A.A.Emhemed, Assistant Professor, College of Technical Sciences-Bani walid, Libya

## Acknowledgements

The organizing committee would like to thank all those people who were involved in making the conference a success. A great amount of planning and organizing is required to hold a successful conference, so we are indebted to those who volunteered their time and energy.

We want to thank all the members of the Association of Engineering Technology & Applied Sciences who volunteered their time to help organize the conference.

## Engineering & Technology Studies

Acoustical engineering Agricultural engineering Aquacultural engineering Aquatic and environmental engineering Architectural engineering Army engineering maintenance Atomic engineering Aviation engineering B Biological interface engineering Biomechanical engineering Bioresource engineering Broadcast engineering Building services engineering C Ceramic engineering Chemical engineering Civil engineering Civionics Climate engineering Cloud engineering Collaborative engineering Computer engineering Computer-aided engineering Computer-aided production engineering Construction engineering Control engineering Cost engineering D Detailed engineering E Earthquake engineering Ecological engineering Electrical engineering Electronic engineering.

## Accounting

Accounting Practices, Financial Modeling, Financial Analysis, Financial Statistics, Future Markets, Risk, New Trends for Accounting and Finance, Research for Accounting, Tax Theories and Practices, Tax Avoidance, Invasion and Extraction from Tax Invasion, Corporate Finance, Finance Theories, Money, Credit and Banking, Stock, Currency and Bonds, Commodity

## Computational Engineering

Computational science and engineering (CSE) is a relatively new discipline that deals with the development and application of computational models and simulations, often coupled with high-performance computing, to solve complex physical problems arising in engineering analysis and design (computational engineering) as well as natural phenomena (computational science). CSE has been described as the "third mode of discovery" (next to theory and experimentation).[1] In many fields, computer simulation is integral and therefore essential to business and research. Computer simulation provides the capability to enter fields that are either inaccessible to traditional experimentation or where carrying out traditional empirical inquiries is prohibitively expensive. CSE should neither be confused with pure computer science, nor with computer engineering, although a wide domain in the former is used in CSE (e.g., certain algorithms, data structures, parallel programming, high performance computing) and some problems in the latter can be modeled and solved with CSE methods (as an application area).A Agent-based computational economics Algorithmic art Artificial intelligence Astrominformatics Author profiling B Biodiversity informatics Biological computation C Cellular automaton Chaos theory Cheminformatics Code stylometry Community informatics Computable topology Computational aeroacoustics Computational archaeology Computational astrophysics Computational auditory scene analysis Computational biology Computational chemistry Computational cognition Computational complexity theory Computational creativity Computational criminology Computational economics Computational electromagnetics Computational epigenetics Computational epistemology

## Interdisciplinary

Children and Youth, Communications and Media, Complex Systems, Conflict resolution, Creativity, Culture, Disaster Management, Discourse, Film studies, Gender studies, Globalization, HIV/AIDS, Human Rights, Identity, LGBT Studies, Leadership, Memory, Multidisciplinary Studies, Poverty, Public Policy, Security, Sexuality and eroticism, Spirituality, Sport science, Sustainable development, Urban studies, Violence Women's studies

## General Economics, Economic Development, Technological Change and Growth

Microeconomics, Household Behavior and Family Economics, Economic Development, Sustainable Development, Eco-Development, Production and Organizations, Welfare Economics, Macroeconomics and Monetary Economics, International Economics, Public Economics, Analyses of Economic Development, Agriculture; Natural Resources; Energy; Environment; Other Primary Products, Human Resources; Human Development; Income Distribution; Migration, Economic Development: Financial Markets; Savings and Capital Investment; Corporate Finance and Governance, Regional, Urban, and Rural Analyses, International Linkages to Development; Role of International Organizations, Fiscal and Monetary Policy in Development, Trade Policy; Factor Movement Policy; Foreign Exchange, Innovation and Invention: Processes and Incentives, Management of Technological Innovation and Research and Development

## **IT Business**

Business for AI and Deep Learning, Technological Forecasting and Social Change, Business for Big Data, Internet of Things and Cloud Computing, Business for IT-driven Services, Information Systems and Informatics, ICT for Business, ICT for Education, Healthcare, Finance and Other Sectors, Large Scale Surveys and Analysis, HCI and Computers Human Behavior, Computers In Industry



## Conference Schedule

### **AETA International Conference on Machine Learning, Applied Sciences, Information Technology, Artificial Intelligence & Engineering (MAIE)**

Rome, Italy

November 25-26, 2019

09: 00 am - 09: 30 am	Registration and Reception
09: 30 am - 09:40 am	Introduction of Participants
09: 40 am - 09:50 am	Inauguration and Opening address
09: 50 am - 10:00 am	Grand Networking Session
10: 00 am - 10:30 am	Tea Break

## **AETA International Conference on Machine Learning, Applied Sciences, Information Technology, Artificial Intelligence & Engineering (MAIE)**

**Day 01: Monday  
November 25, 2019**

**Session 01: 10:30 am - 12:00 pm**

### **Track A: Engineering, Technology & Applied Sciences**

---

Presenter Name: Taewoo Kim

Reference ID: MAIE-011-P2

Paper Title: Method for Displaying CCTV Heading on the Map in Existing Video Management System

---

Presenter Name: Hilal Erdogan Sumnu & Hakan Ta

Reference ID: MAIE-011-P4

Paper Title: Development of A Hybrid Real Estate Recommender System

---

**Closing Ceremony & Lunch (12:00 pm 01:00 pm)**

---

# **AETA International Conference on Machine Learning, Applied Sciences, Information Technology, Artificial Intelligence & Engineering (MAIE)**

**Day 02: Tuesday  
November 26, 2019**

**Conference second day is reserved for participants own tourism activities.**

## **Conference Abstracts**

**Track A: Engineering, Technology & Applied Sciences**

## Development of A Hybrid Real Estate Recommender System

Hakan Tas<sup>1</sup>, Hilal Erdogan Sumnu<sup>2</sup>, Bahadir Gokoz<sup>3</sup>, Tevfik Aytekin<sup>4</sup>

<sup>1,2,3</sup>Zingat.com, Istanbul, Turkey

<sup>4</sup> Bahcesehir University, Istanbul, Turkey

**Corresponding email:** hilal.sumnu@zingat.com

---

Today consumers are confronted with a very large number of products and services to choose from. This makes it difficult for users to find relevant products among a huge number of alternatives. Recommender systems help users to find products of interest by analyzing past user transactions such as product views and purchases. There is a similar problem in the real estate industry where hundreds of thousands of properties are available for rentals or sales. In this work we present the details of a real estate recommender system developed for Zingat.com. The system developed is a hybrid of collaborative and content filtering approaches. We will explain the challenges we face, the recommendation techniques we use to overcome these challenges, and the final product used for recommendation.

**Index Terms:** Recommendation Engine, Artificial Intelligence, Machine Learning, Real estate, Zingat.com

# Method for Displaying CCTV Heading on the Map in Existing Video Management System

Taewoo Kim <sup>1\*</sup>, Hyuncheon Kim <sup>2</sup>, Pyeongkang Kim <sup>3</sup>, Youngkyun Cha <sup>4</sup>

<sup>1,3</sup>Innodep Inc

<sup>2,4</sup>Korea University, Seoul, Korea

**Corresponding email:** davidkim@innodep.com

---

The importance of integrated control centers is becoming increasingly important in modern times when various incidents occur. The control center usually has a program that stores and displays CCTV(ClosedCircuit TeleVision) video and a GIS(Geographic Information System) solution that displays the location of the camera on a map. Most GIS solutions only display the current camera location but do not indicate which direction the camera is looking. Because you do not know the azimuth that you are looking at. In this paper, we propose a method to express the steering direction of a camera on a map using an existing system.

**Index Terms:** Azimuth Angle, CCTV, Existing System, Integrated Control Centers

## Upcoming Events

---

<https://association-eta.com/rbte-dec-19/>

---

<https://association-eta.com/iabp-dec-19/>

---

<https://association-eta.com/mair-jan-20/>

---

<https://association-eta.com/eacm-feb-20/>

---

<https://association-eta.com/asin-feb-20/>

---

<https://association-eta.com/nrsea-mar-20/>

---

<https://association-eta.com/saeit-mar-20/>

---

<https://association-eta.com/esai-apr-20/>

---

