智慧城市
SMART CITY @KOWLOON EAST 九龍東

Smart 智慧 KE 九龍東 城市 CITY

Digital China & HKUST - BDI Cup

Smart City in Hong Kong

The final round and exhibition

Time: 10 Dec 2017 (Sun) 14:00 – 17:30
Venue: LTF, HKUST

Teams:

Project-City	Taiwan AI	HKUST Marque	take stairs PLZ!
Polarisk	Abacus Demon	WeCare!	

Judges:

Brenda AU, head of Energizing Kowloon East Office
Yun Xie, Senior Vice President, Digital China
Kaiser CHEON, Vice President, Smart City, Digital China
Qiang Yang, Chair Professor and Head of Dept. of CSE, HKUST
Lei Chen, Professor, Dept. of CSE, HKUST

Digital China, HKUST-BDI and Energizing Kowloon East Office are holding a competition on "Smart City in Hong Kong". Challenge yourself on using the latest cool data mining and analysis technologies to change the city!

Witnessing the growth of entrepreneurial activities and big data technology in our region, the Competition aims to provide a platform for HKUST and surrounding community members as well as Hong Kong citizens an integrative learning experience to create and evaluate new data analysis technology to fulfil and improve the city service in Hong Kong. Competition projects are encouraged to focus on (but not limited to) the following areas: Traffic and Transportation, Weather and Environment, Stock and Company, Social Media Hot topics, etc. Winners of the Competition can use the cash prize as seed money to further the commercialization of their techniques and inventions and get the internship of Digital China. Also, outstanding projects in the competition will have the opportunity to receive further investment. For the participating teams, we will give the access right to the data of the Hong Kong weather, environment, transportation, finance and other aspects.

香港科技大學 THE HONG KONG UNIVERSITY OF SCIENCE AND TECHNOLOGY

神州控股 DC Holdings

發展局 Development Bureau
Kowloon East Office 九龍東辦事處

更多详情:
More detail:

Contact us(聯繫我們): ycaiap@cse.ust.hk

https://www.cse.ust.hk/smartcitycompetition/

Team 1 HKUST Marque

Smart Traffic Monitoring System

Briefing

Monitoring traffic is essential for drivers, passengers and emergency services. A comprehensive, accurate and real-time source of traffic information can help improving the efficiency of road usage and arrival time of emergency services.

This project proposed a deep-learning based computer vision model to provide high quality road condition information without human interference.

Team 2 Project-City

Fire Services Command and Control System

Briefing

The aim of this project is to develop a Fire Services Information System, facilitating the command and control work of fire and rescue services so as to improve the efficiency of the actions and to reduce the risk of frntline officer.

With the help of this system, users can deploy resources, monitor the status of fronline officers and situation of the field and record the whole process for post-event investigation.

This project has several features, Control System(Visualiztion strategy deployment, Global Monitoring and Digitized records), Smart Exploration Vehicle(Remote control, Environment data collection and Mechanized units), Smart Helmet(Video streaming, Monitor Life expectancy and Digitized equipment) and Mobile Application(Immediate news, Emergency help and Information share).

Team 3 Polarisk

Digital Traffic Diversion Recommendation Sign in Kowloon East

Briefing

This project is to design digital road signs within Kowloon East to suggest diversion to get one place if there are alternative pathways, and ease the traffic situations. Different methodologies are proposed in order to form these recommendations to display on the electronic road signs.

Team 4 Abacus Demon

Public Data Analysis Platform in Hong Kong

Briefing

The purpose of this project is providing a portal for government or professional to view consolidated information from gathered data to eliminate the huge effort that officials have to go through in order to obtain usable insights (E.g. Chart of average amount of vehicle during business hours at central). They extracted numerous amount of traffic snapshots provided by the transport department and build and train an object detection model to aim to obtain the number of different vehicles in the snapshot. The results is then uploaded into a cloud database for storing and analytics. Business intelligence tool is then used to visualize the results, various presentation type is supported such as Bar chart, heat map.

Team 5 Taiwan AI

Intelligent Traffic System

Briefing

This project is aim to optimize the behavior of traffic lights to improve traffic efficiency. by installing cameras and chips one traffic lights to capture images of the traffic and send them to server, the server use computer vision to recognize the number of cars and train the reinforcement learning model continuously to feedback the optimal actions to traffic lights, such as increase red lights by 10 seconds...

Team 6 take stairs PLZ!

Smart City Worry-Free Campus

Briefing

This project (WORRY-FREE CAMPUS) is aim to construct a smart city system which consist of several sub-systems such as air quality forecasting system, traffic forecasting system, AQHI forecasting system, smart system of traffic control around Campus (Intelligent Monitoring System and Intelligent Controlling System) and Smart System of Noise Supervise around Campus, in order to create an environment-friendly society mainly for schools. This project mainly provides a method to give a real-time prediction of air quality, especially for students and their parents. The aim of worry-free campus is to provide real-time and forecasting data of AQI, traffic volume and traffic noise around Hong Kong's primary and secondary schools for Hong Kong Education Bureau, and to serve primary and secondary school students and their parents by using public education app. It will provide health and safety protection for primary and secondary school students in Hong Kong.

Team 7 WeCare!

WeCare!

Briefing

WeCare! is a digital platform harnessing open-source weather data from cities such as Hong Kong to give tailor-made preventive solutions to users who subscribe this service in order to minimize risks due to critical weather conditions and climate change. The goal is to reduce risks from natural disasters, also clients can also find people who are nearby and also users of our app for help instantly by signing smart contracts in exchange for some earnings using block chain implementation.