



News / Hong Kong / Economy

Hong Kong International Airport

Trolley dash at Hong Kong airport as new monitoring system ensures passengers never left holding their bags

Engineers at Chinese University have developed a real-time artificial intelligence-based monitoring system that sends an alert to managers when the number of trolleys drops below 50

PUBLISHED : Monday, 11 September, 2017, 8:03pm
UPDATED : Monday, 11 September, 2017, 11:34pm

COMMENTS: 6



Harminder Singh

88 SHARES

RELATED TOPICS
Hong Kong International Airport

Airline passengers arriving at Hong Kong airport may never again have to worry about the availability of baggage trolleys thanks to the development of a real-time artificial intelligence-based monitoring system by engineers at Chinese University.

HONG KONG NEWS

Get updates direct to your inbox

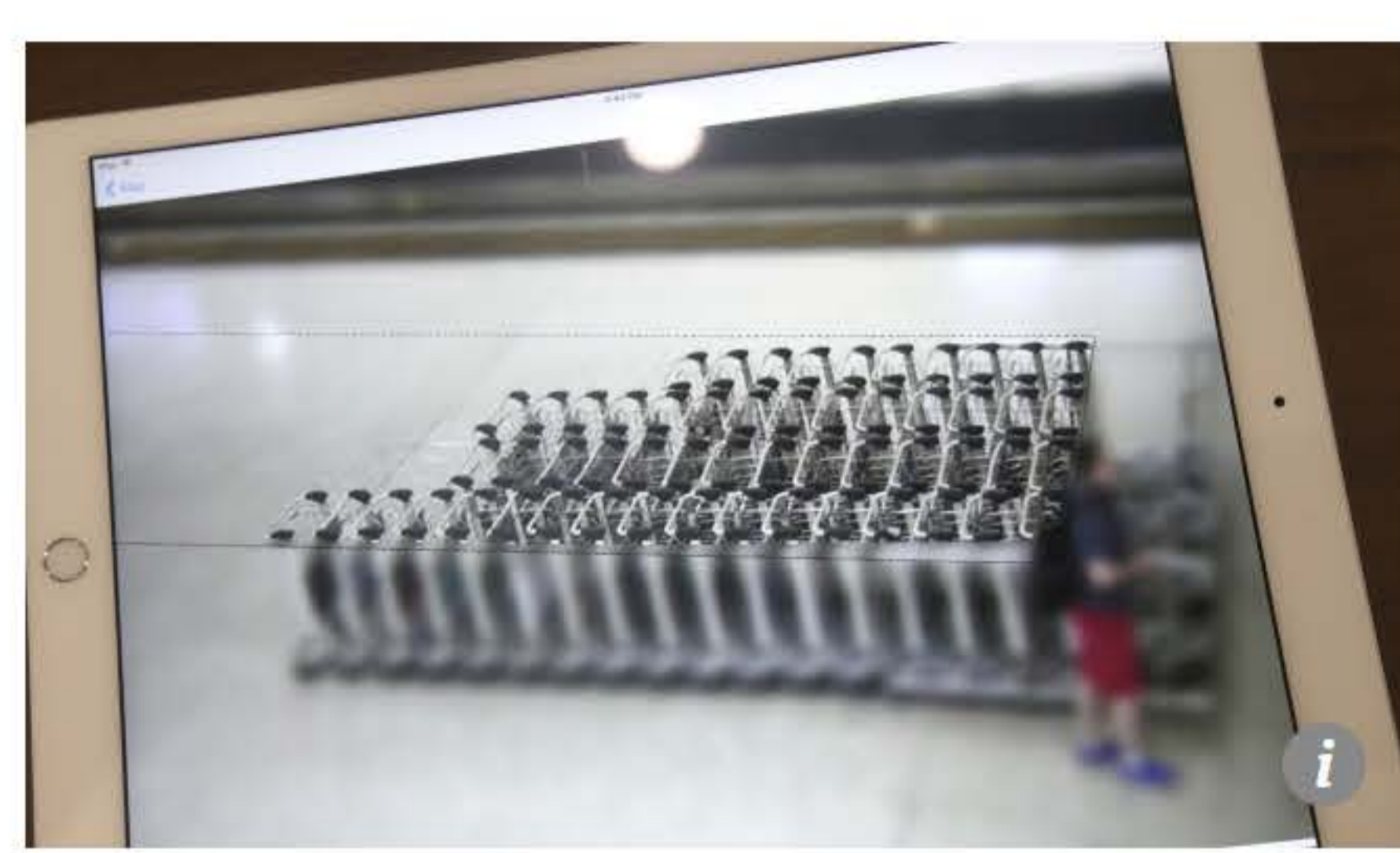
Enter your email

By registering you agree to our T&Cs & Privacy Policy

The system's AI analyses video – similar to existing facial recognition technology – of trolleys set up in designated areas in the airport. When it detects fewer than 50 trolleys, the system sends out an alert to trolley managers on the floor, through a smartphone app, to replenish.

Since the system was deployed on a trial basis at the airport's baggage collection area in November, it has achieved 92 per cent accuracy in detecting the number of trolleys, according to the development team.

"The airport had the problem [of not having enough trolleys] and they went to the LSCM R&D Centre [Research and Development Centre for Logistics and Supply Chain Management Enabling Technologies] ... after a simple trial in 2014 they were excited about the possibility," team leader Professor Cheng Chun-hung said.



There are around 13,000 baggage trolleys distributed throughout the airport to serve 70.5 million travellers who come through the airport every year.



The previous method of trolley replenishment involved a manager personally inspecting the number of trolleys available for passengers.

"The problem was that at that moment you might have enough, but if a super jumbo with 600 people lands, then they will be all gone quickly," Cheng said.

"And you can't distribute passengers to different baggage carousels, they all go to the same carousel."

The manager will not see the depleted trolleys until they make their next round, while the system can immediately notify staff of the depletion.

Smart Airport general manager at Airport Authority, Chris Au Young, said the system improved the service level of trolley availability in the baggage reclaim hall.



Cheng said that the system was "a low-cost solution" since the technology can be installed on an existing camera network of any area. He did not reveal the actual costs.

However, implementing the system in outdoor areas was more difficult.

Unstable lighting of outdoor areas decreased the system's ability to accurately count the number of trolleys available.

But Cheng said his team is working on improving it and hopes the system can be deployed outdoors in the near future.

Interest for the system has been from other airports, government agencies and warehouses.

"Since trolley management is a common challenge for most airports in the world, this would be a good opportunity to export such a solution and Hong Kong International Airport would be a good showcase to illustrate the business benefits," Au Young said.

Captured images will only show trolleys and will automatically blur the surrounding areas to protect privacy.

Related Articles

ECONOMY
Hong Kong Investigates Singapore Airlines crew over security breach
9 Mar 2018

ECONOMY
Why handling sensitive medical air cargo is a win for Hong Kong
6 Mar 2018

NEWS & TRENDS
Cathay's luxurious new Hong Kong airport lounge 'just like home'
28 Feb 2018

G Suite

高效多元的商務智能套件。

開始

Google Cloud

We recommend for you

CHINA NEWS

Why has Cantonese fallen out of favour with Guangzhou youngsters?
12 Mar 2018

STYLE

6 best dim sum restaurants in Macau
08 Mar 2018

Air pollution keeps Hong Kong in 28th place in expat liveability...
13 Mar 2018

G Suite, 高效多元的商務智能套件。
開始
Google Cloud

China rises to No. 2 art market as billionaires more than double in...
14 Mar 2018

'Unnatural, immoral, foreign': controversy blows up over sex dolls in...
12 Mar 2018

You only sing when there's dying: Lyrics about tragedies are full...
12 Mar 2018

'Sexually abusive': legendary conductor James Levine's career ends in...
15 Mar 2018

Not all white: how K-pop and Asian hip
開始
Google Cloud

MOST POPULAR

- 1 Chinese reporter censored after her eye-roll on live TV goes viral
- 2 Beijing police order limit on foreigners in pizza bars and cafes
- 3 Where's his brain? Doctors find giant air pocket in man's skull
- 4 Hongkonger killed, put girlfriend in suitcase, Taiwan police suspect
- 5 Experts applaud Tillerson's firing – and say McMaster could be next

Liquid Web

A SUPPORT TEAM THAT WON'T LET YOU DOWN.

Meet the Most Helpful Humans in Hosting™

Upgrade to Liquid Web

PROMOTIONS

Taste of Hong Kong

WHERE HONG KONG'S FOOD LOVERS FEAST

SCMP invites you to Taste of Hong Kong 2018

SCMP RECOMMENDS (LAST 24HRS)

NEWS
Russia denies poisoning ex-spy in English city as UK's deadline for an explanation looms
14 Mar 2018

NEWS
London lawyer accused of forcing daughter to undergo female genital mutilation
13 Mar 2018

NEWS
World's great forests could lose half of all plants and wildlife as planet warms, report warns
14 Mar 2018

NEWS
Trump kills US\$117 billion takeover of Qualcomm by Singapore's Broadcom, citing national security threat
13 Mar 2018

NEWS
Beijing police order limit on foreigners in university district pizza bars and cafes
13 Mar 2018

NEWS
Xi shakes up Chinese government to cut bureaucracy, end turf wars
13 Mar 2018

NEWS
The Chinese reporter's eye-roll that turned a fawning question into an unmissable TV moment
13 Mar 2018

NEWS
Why Australia should refrain from fawning China with gunboat diplomacy in the South China Sea
13 Mar 2018

SPONSORED CONTENT

Flipping burgers by day and managing \$12.75m trade fund by night
BORO FC - BORO NEWS

These 3 Foods Shown to Improve Vision. (Try Today)
SOUKITA - HEALTH

Better Than Botox? Do This Once Daily
SKINWOMENSBEAUTYONLINE

New Discovery Reveals Simple Tip To Improve Eyesight (Watch)
HEALTHNEWSIPTODAYHK

1 Tip That Finally Turned Yellow Teeth White
HEALTH & REALITY

Wedding Dresses That Should Have Never Existed
OMGI

How To Buy Bitcoin Quickly While Prices Are Low
WWW.CRYPTOMARKETS.COM

Litecoin: The Fifth Largest Crypto by Market Cap Could Be Amazon's First
CRYPTOTRADES.NEWS

YOU MAY ALSO LIKE

OPINION
Hong Kong is about to trigger a global financial crisis. Really?
12 Mar 2018 - 1:45pm

ARTS
A youngster's 'sugar rush' turns surreal in Hong Kong Arts Festival's 'Whipped Cream' Fantasy ballet
In partnership with: HK ARTS FESTIVAL

POLITICS
Why is Najib pushing fake news laws before Malaysia election?
11 Mar 2018 - 8:05am

LOEWE
LOEWE introduces a new traveller
Brought to you by: LOEWE

HONG KONG
Hong Kong democrats fail to win back Legco veto foothold in by-election
12 Mar 2018 - 2:52pm

Hong Kong
Politics
Economy
Health & Environment
Law & Crime
Education & Community

China
Policies & Politics
Diplomacy & Defence
Money & Wealth
Society
Economy
Tech

Business
Companies
Markets
Property
Investor Relations
Mutual Funds
Economy
China Economy
Money & Wealth
Country Reports

Tech
China Tech
Enterprises
Social & Gadgets
Start-ups
Apps & Gaming
Innovation
Leaders & Founders
Science & Research
E-Commerce

Lifestyle
Arts & Entertainment
Health & Beauty
Film & TV
Food & Drink
Families
Music
Fashion & Luxury
Books
Travel & Leisure
Watches

Sport
Hong Kong
China
Golf
Racing
Rugby
Soccer
Tennis
Boxing

Comment
Insight & Opinion
Harry's View
Plogs
Blogs
Letters

Magazine
Post Magazine
Style
Good Eating
Destination Macau
HK Magazine Archive

Other
Topics
Weather
Most Popular
7 Days Index
Country Reports
Crossword
Promotions

SCMP PUBLISHERS **PRIVACY POLICY** **FAQS** **TERMS & CONDITIONS** **WORK FOR US** **CONTACT US**

Copyright © 2018 South China Morning Post Publishers Ltd. All rights reserved.