



Celtic-Plus Event
Project Ideas and Networking
19st May 2017, Barcelona

Traffic Accident Forecasting System based on IoT and Big Data

Quantumgate co. Senior researcher Eun-Sik Chae eschae @quantumgate.com







Teaser



Necessity

- In UK, Reducing Average vehicle speed 5Km/h caused redusing over 30% of Children's traffic accident rate.
- Traffic enforcement in front of crosswalk is not enough!
 Have to Slow down before entering school zone,
 Senior Zone, Accident Hazard Zone.

◆ Purpose

Reduce fatal and injuries accident in School Zone, Senior Zone, Accident Hazard Zone By Traffic Accident Forecasting System



Organisation Profile





By the Fusion of Technology and Design.

Make New Value and Experience.

Resolve National, Social and Customer issues.

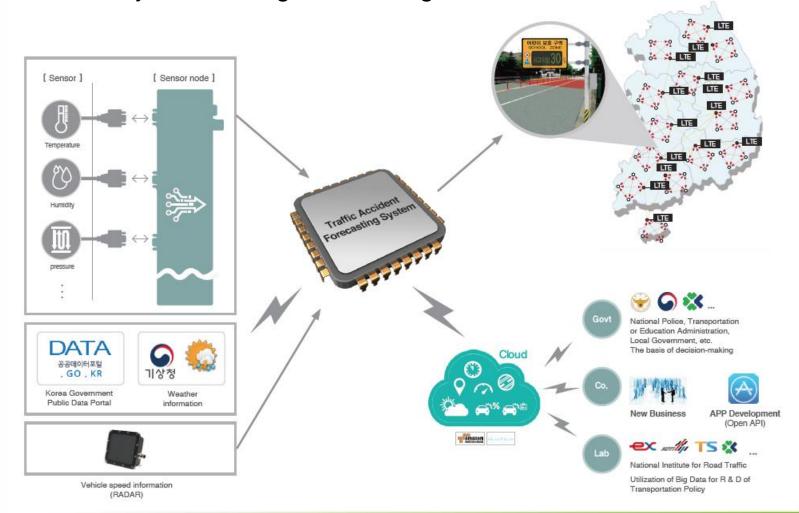
Company Name	Quantum Gate
Establish Date	2016. 03. 15
CEO	Ju-Yong Back
Business	Manufacturing, ICT
Location	[14087] 204, 72, Deokcheon-ro 72beon-gil, Manan-gu, Anyang-si, Gyeonggi-do, Republic of Korea
Employee	8



Proposal Introduction



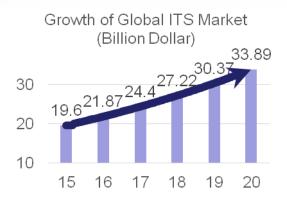
Overall System Configuration Diagram





Proposal Introduction





- The average annual growth rate from 2011 to 2015 was 9.3%
- USA: WAVE communication standard confirmed by IEEE in 2010
- Europe: Extending ITS on the road
- Estimated growth of approximately \$ 33.9 billion by 2020





Partners



We look for someone to help us!

- Technology Transfer
- Joint Research
- Advice







Sensor

- Non Invasive Measurements
- Integrated weather sensor

V2X (V2I) Technology and Standards

- WAVE (Wireless Access in Vehicular Environment)
- 5.9GHz frequency band

ETC.

Big Data Analysis

- Predictive Model
- Machine LearningIoT
- •LPWA
- •Mobile Network (3G~5G)



Contact Info





Name	Eun-sik Chae
Position	Senior Researcher
Department	R&D
E-mail	eschae@quantumgate.co.kr
Postal Address	[14087] 204, 72, Deokcheon-ro 72beon-gil, Manan-gu, Anyang-si, Gyeonggi-do, Republic of Korea
Phone Contact	+82.10.4223.1839