JaeYoung Hwang

Nationality: South Korean (Republic of Korea)

Date of birth: 25/06/1990

Gender: Male

Email address: forest62590@gmail.com

Website: https://hwangjaeyoung.github.io/

Address : Seoul (South Korea)

EDUCATION AND TRAINING

Ph.D, Computer Engineering

Sejong University [01/09/2015 – 21/08/2020]

Address: Seoul (South Korea)

Final grade : 4.27/4.5

B.S, Computer Engineering

Sejong University [02/03/2009 – 21/08/2015]

Address: Seoul (South Korea)

Final grade : 3.49/4.5

MILITARY SERVICE

Sergeant, Republic of Korea Defense Communication Command (ROKDCC)

[22/02/2010 – 10/12/2011]

WORK EXPERIENCE

Assistant researcher

Autonomous IoT Research Center, Korea Electronics Technology Institute (KETI) [01/03/2016 – 29/02/2020]

City: Seongnam-si, Gyeonggi-do

Country: South Korea

- IoT relevant research (Smart cities, Platform development, Standard contribution, Conformance testing tool development)
- Deep learning for the IoT services
- 5G and Edge Computing for the IoT environment

PROJECTS

Fast intelligence analysis HW/SW Engine Exploiting IoT Platform for Boosting On-device AI in 5G

[11/05/2020 – Current]

- Establishment of context-based spatial classification process through time and space
- Research on how to use the existing context information model
- Verify the feasibility and usability of developed services in the 5G environments

Autonomous Management framework based on AI Technology for adaptive and disposable IoT

[07/08/2018 – Current]

- Design and standardization of information models for managing disposable IoT terminals, systems, and applications in Edge Computing environments
- Development of ID processing technology when reusing disposable IoT devices

Synchronicity

[25/06/2018 – 29/02/2020]

- Using deep learning and image processing technology to check the parking status
- Deliver the results to the IoT platform and use the information for supporting the web/apps

An open source oneM2M conformance testing tool project

[22/02/2017 – 16/05/2018]

- oneM2MTester main contributor
- The TTCN-3 based oneM2M testing code verification which is being developed by ETSI
- Collaboration with external organizations such as TTA, ETSI, and Ericsson to develop an oneM2M testing tool

Worldwide interoperability for semantics IoT (Wise-IoT)

[14/02/2016 – 23/02/2018]

- Analyzing the oneM2M and FIWARE
- Developing the Interworking Proxy Entity (IPE) for oneM2M-FIWARE interworking

PUBLICATIONS

IoT service slicing and task offloading for edge computing

[2020]

* * Under revision **

oneM2M-MEC-5G interworking using edge computing

[2020]

TTA Journal

AUTOCON-IoT: Automated and Scalable Online Conformance Testing for IoT Applications

[2020]

IEEE Access

Modbus and IoT Platform Interworking for Smart Energy Management

[2019]

2019 IEEE International Conference on Industrial Internet (ICII)

Interworking Models of Smart City with Heterogeneous Internet of Things Standards

[2019]

IEEE Communications Magazine

Toward global IoT-enabled smart cities interworking using adaptive semantic adapter

[2019]

IEEE Internet of Things Journal

IoT-TaaS: Towards a prospective IoT testing framework
[2018]

IEEE Access

Standard trends of smart cities
[2018]

TTA Journal

Interworking technique and architecture for connecting LAN IoT devices towards standardized IoT
[2016]

2016 IEEE 5th Global Conference on Consumer Electronics

HONOURS AND AWARDS

Meteorological Industry Start-up Contest (1st prize)
Korea Meteorological Administration [18/12/2014]

- Prototype development of web/app service using weather big data

Sejong University Software Development Competition (2nd prize)
Department of Computer Engineering, Sejong University [24/12/2013]

- Role-playing game development (Unity 3D)

Scholarship (4th ranked)
Department of Computer Engineering, Sejong University [03/09/2012]

PATENT

Apparatus and Method for testing Machine to Machine Application

KR Patent

https://doi.org/10.8080/1020170127108

DIGITAL SKILLS

Python / **Java** / **C** / **HTML** / **CSS** / **Linux** / **JSON** / **MySQL** / **Javascript** / **Git** / **JQuery**