Youngjune Oh

Phone: Upon request
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Programming Languages: C/C++, Java, Python, Erlang, MATLAB

EDUCATION

Seoul National University, Republic of Korea
- M.S. in Computer Science and Engineering — Mar 2017 – Feb 2019

Handong Global University, Republic of Korea
- B.S. in Computer Science and Electrical Engineering — Mar 2011 – Feb 2017

AREAS OF INTEREST

Internet of Things (IoT), Cyber-physical systems, Wireless Sensor network, Low Power Wide Area Network (LPWAN), Computer Network, Machine learning, Blockchain

SKILLS

Programming Languages and Tools (Advanced || Experienced)
C/C++, Java (Adv.) || Python, Erlang, MATLAB, OCaml (Exp.)

Developing Environments and Platforms
Linux (Ubuntu), Windows, Embedded Development Tool (KEIL), Contiki OS, Raspberry pi & Development boards

Language Proficiency
Korean – native
English – business level

RESEARCH EXPERIENCE

IoT Based Social Relation Analysis — **Sep 2018 – Dec 2018**
- Analyzed similarities among students by clustering algorithm with data collected with BLE.

(C/C++, Python)

TRILO: Downlink Communication Protocol for LoRaWAN — **Sep 2017 – Sep 2018**
- Increased downlink energy efficiency for low power wide area network by 50% by implementing polling-based mac protocol for LoRaWAN.

(C/C++, Erlang, Python, MATLAB)

Localization with Bluetooth Low Energy — **June 2017 – Sep 2017**
- Achieved under 1.5m error for 85% of dataset by data collection and preprocessing and classification with supervised machine learning algorithms.

(C/C++, Java)

Real-time Heart-monitoring System — **Sep 2015 – Aug 2016**
- Implemented PoC application for real-time data monitoring system using BLE over IPv6 with CoAP protocol.

(C/C++, Java, Python, Ajax)

TEACHING EXPERIENCE

Seoul National University, Seoul, Republic of Korea
- **Teaching Assistant**, Dept. of Computer Science and Engineering
  - Engineering Mathematics 2 (033.015) — **Spring 2017**
  - Artificial intelligence agent course by Ministry of Employment and Labor — **July 2017**
  - Computer Networks (4190.411) — **Fall 2017**
  - Artificial intelligence agent course by Ministry of Employment and Labor — **July 2018**

PUBLICATIONS

1. Youngjune Oh, Jongwon Lee, and Chong-kwon Kim, "TRILO: A Traffic Indication-Based Downlink Communication Protocol for LoRaWAN", Wireless Communications and Mobile Computing, 2018. (SCIE)

2. Junhyun Park, Youngjune Oh, Hyungho Byun and Chong-kwon Kim. "Low Cost Fine-grained Air Quality Monitoring System Using LoRaWAN." in Proc. of IEEE ICOIN. 2019

3. Seohyang Kim, Junhyun Park, Hyungho Byun, Youngjune Oh, and Chongkwon Kim, "Toward Highly Reliable and Efficient IoT Communication: Analysis and Application of Recent IETF Research Trend", Korea Software Congress 2017

4. Hyungho Byun, Youngjune Oh, and Chong-Kwon Kim, "Multi-hop Communication Strategy in Bluetooth Low Energy" The 41th Conference of KIICE, 2017