MICHAEL J. PARK

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EDUCATION

Georgia Institute of Technology *August 2017 - Present*
MS, Electrical and Computer Engineering

University of Texas at Austin *December 2016*
BS, Electrical and Computer Engineering
Senior Project: Batteryless and Wireless Data Acqusition Implant and System

EXPERIENCES

Industry

MKS Instruments January 2015 - November 2015
Embedded Software Co-op *Austin, TX*

- Created an automated test framework for testing EtherCAT, Modbus TCP, and RS-232 protocols
- Ported EtherCAT module into a bootloader for an embedded device
- Added restoration and debugging features in a bootloader to support testing DDR memory
- Wrote and troubleshooted embedded software applications for different devices
- Modified an embedded web server API using JSON and RESTful architecture
- Tested latency, performance, and interoperability of embedded nodes on a CAN network
- Supported internal customers

Academic

University of Texas at Austin May 2016 - December 2016
Undergraduate Research Assistant *Austin, TX*

- Wrote a literature review on deep learning applications in the embedded domain
- Evaluated open-source neural network libraries on embedded platforms to collect preliminary data
- Explored electronic system-level design

Keimyung University May 2013 - August 2013, May 2014 - August 2014
Undergraduate Research Assistant *Daegu, South Korea*

- Fabricated a thermocouple based distributed temperature sensor
- Designed and tested a bridge circuit based platinum temperature sensor
- Analyzed data of the temperature sensors

AWARD & ACHIEVEMENTS

1st Place – NXP Cup Challenge 2016 (Amateur Division)

- Wrote an embedded software for an autonomous model car to participate in a race
- Designed and tested an image-based PID control algorithm used to navigate our model car

1st Place – Honors Senior Design Competition Fall 2016 (UT ECE)

- Developed a batteryless data acquisition implant that communicates through an induction coil
- Built a system around the implant that allows users to control the implant through a web application
- Primarily contributed to developing the embedded software and testing the full system

Member – HKN (ECE Honor Society) Since Spring 2015

- Satisfied honors and pledge requirements

TECHNICAL SKILLS

General	Embedded Systems, Software, Machine Learning
Languages	C/C++, Python, MATLAB/OCTAVE, ASM(ARM, MIPS), VHDL/Verilog, Java, LaTeX
Platforms	Raspberry Pi, Odroid, Android, TI(TM4C, RF430FRL), AVR(ATmega128)
OS	Linux, Windows

RELEVANT COURSEWORKS

UT Austin

Real-Time Operating Systems, Computer Architecture, Digital Systems Design Using HDL,
Embedded Systems Design Lab, Real-Time Digital Signal Processing Lab,
Algorithms, Data Structures, C/C++ Programming,
Probability and Random Processes, Electromagnetic Engineering

MOOC

Machine Learning by Stanford University on Coursera,
Control of Mobile Robots by Georgia Tech on Coursera

PUBLICATION & PATENT

Journal

1) Jaehee Park, **Michael Jin Park**, and Dohyun Ahn, "Thermocouple-Based Distributed Temperature Sensor", *International Journal of Electrical and Electronics Engineering Research(IJEEER)*, vol.6, no.4, pp 69-74, 2016.

Patent

1) J. Park, M. Kim, J. Kim, **M. Park**, and Jae-Cheon Lee, Distribution-Type Thermocouple Sensor and Thermocouple-Based Distribution-Type Temperature Measurement System Using Same, PCT/KR2014/004318, 2014.

LANGUAGES

English	Native or Bilingual Proficiency
Korean	Native or Bilingual Proficiency
Japanese	Elementary Proficiency