MICHAEL J. PARK

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EDUCATION

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

EXPERIENCES

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

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 to enable TFTP for loading application on an embedded device
- Added restoration and debugging features in a bootloader to support testing DDR memory on an embedded device
- 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

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.

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

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

LANGUAGES

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