

# MICHAEL J. PARK

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US Citizen ◇ Seeking a Full-Time or Part-Time Position

## EDUCATION

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### 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 Implant and Data Acquisition System

## EXPERIENCES

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### Healthcare Robotics Lab, Georgia Institute of Technology

August 2017 - December 2017

Graduate Research Assistant

Atlanta, GA

- Leveraged deep learning to develop a time-series prediction method for future robotics applications
- Collected, augmented, and fused multimodal sensor data to create a dataset
- Created a real-time prediction software and a data visualizer to demonstrate the preliminary result

### 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

### The 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

### 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

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### 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

## TECHNICAL SKILLS

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<b>General</b>	Embedded Systems, Software, Machine Learning
<b>Languages</b>	C/C++, Python, Java, MATLAB/OCTAVE, ASM(ARM, MIPS), Verilog, HTML/CSS
<b>Software</b>	Keras, Caffe, ROS, Android, Linux, Windows
<b>Hardware</b>	Raspberry Pi, Odroid, Arduino, TI(TM4C, RF430FRL), AVR(ATmega128)

## RELEVANT COURSEWORKS

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

## PUBLICATION & PATENT

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### 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

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<b>English</b>	Native or Bilingual Proficiency
<b>Korean</b>	Native or Bilingual Proficiency