

## **A Touch-sensor based Morse Code Translator using Intel Galileo**

**Spring 2015**

**CS4000: Individual Studies in Computer Science - Intel Galileo-based Ubiquitous Embedded Applications**



In Spring 2015, I had a chance to do independent study under supervision of Dr. Sunho Lim at Texas Tech University. I was interested in Android application development. After I came to know that Dr. Lim had researched in the field of embedded networked system I approached Dr. Lim to ask if I could do independent study with him. Dr. Lim informed me about Internet of Things (IoT). IoT was completely new to me. After doing some research and looking some sample project, I really liked his idea and we agreed to explore IoT using Intel Galileo.

I started project with simple programs like blinking LED's and displaying text in the LCD panel. In short time I got familiar with the platform of Intel Galileo. Then I started experimenting with different kinds of devices like buzzer, touch sensor and temperature sensor available in Groove Start Kit. Using serial monitor input, LCD panel, touch sensor and sound sensor I was able to implement Morse code coder and decoder. I spend many hours to understand how to use certain sensor and using certain libraries. This helped me to be persistent and never give up without trying hard enough.

The most important thing I learned during this independent Study is how to troubleshoot the problems by doing investigation of the problem. Even though there were no books, homework or test in the independent study course, I always had something to work on. Independent Study was valuable experience I ever had in school. I would like to take at least one more independent study before I graduate from school. I would also like to recommend other student to take an independent study with Dr. Lim.

Aashish Regmi

Undergraduate Student, Junior

Dept of Computer Science

Texas Tech University

Lubbock, TX 79409