Workshop/Tutorial
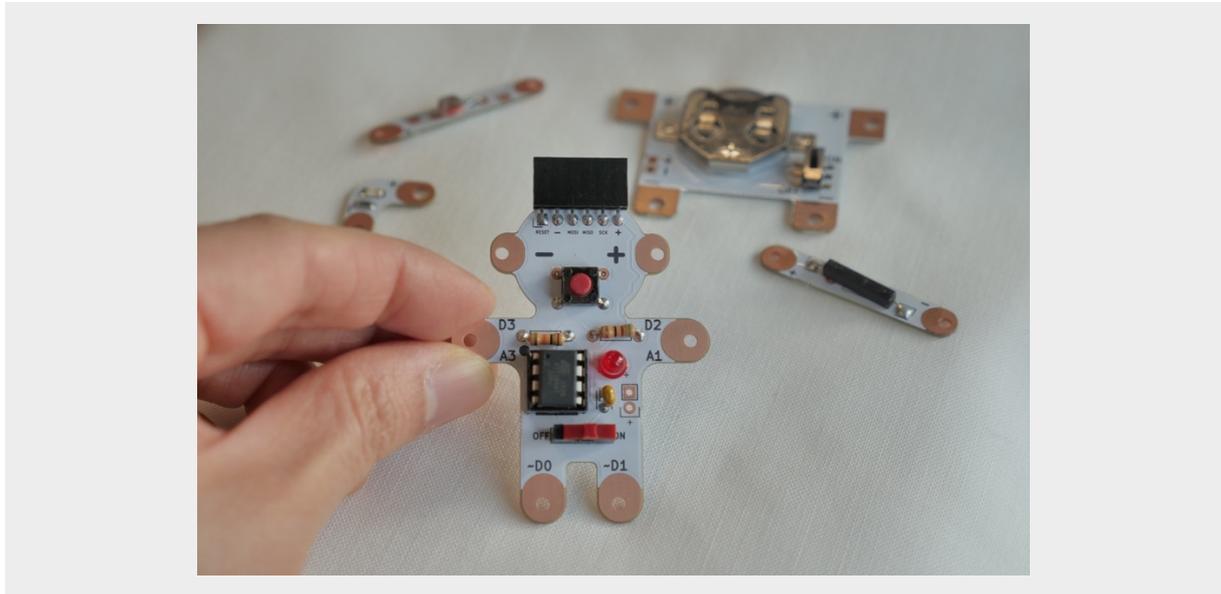
Title MOM: a body-shaped micro controller board for e-textile

Instructor Youjin Jeon(W&T LAB)

Program Schedule

Date/Time: June 22(Sat.)/14:00-18:00

Venue: Community room 1, ACC Archive&Research(B4)

 - MOM Tutorial (2 hours / 14:00 - 16:00)

   The story about MOM will be shared: what it is, how and why it is created by W&T LAB.
   Participants assemble MOM and learn how to use it.

 - Uses of MOM (2 hours / 16:00 - 18:00)

   Participants apply MOM and families (BUL, BAB, TOOL) to fabrics, which can be something that
   participants bring or prepared materials.

Target Audience

Beginner at physical computing and e-textile (aged 12 and over) Participants

Number of participants(max) 10 people

Prerequisite for participants

Bring some fabrics that you want to apply MOM and e-textile stuff to, such as T-shirts, cloth bags
and pieces of cloth.

*FYI : Soldering is necessary in MOM Tutorial, but someone who have never soldered before will be
welcomed.

Abstract

W&T LAB tries to figure how to lower the psychological barrier of beginners to learn/use/enjoy the technologies. MOM (board) is body-shaped board based on ATtiny85 that is a micro-controller chip. Recently many people learn a micro-controller specially Arduino, but still is not easy to understand for person who is not familiar with technologies. MOM is designed as a body, so it is easy to understand the concept of pins and each pin's functions. We don't normally use all pins of micro-controller and sometimes feel confused what to do with those pins. As a simplified version of micro-controller board, MOM can give basic information on micro-controller. Through assembling it, you can understand how to build a micro-controller circuit. Kids love its unique design that can stimulate them to learn physical computing. MOM has sew-able pads that can be used for e-textiles. E-textile is a good way to appeal women and kid who are interested in making and learning technologies. MOM is a micro- controller board working with 3v and it can connect to diverse inputs and outputs like sensors, speaker and switch that also working with 3v. MOM is programmable and Arduino compatible so you can program and upload it to MOM with Arduino IDE. You can make interesting outputs with MOM such as wearable accessories, tools, toys, musical instruments and craftworks. Workshop is divided into two parts: the tutorial of MOM and the application of MOM. Participants assemble MOM and learn how to use MOM. And then they design their own product with MOM and prepared materials.

Short Biography of the Organizers

W&T LAB has been launched since 2016 by Youjin Jeon who is a Seoul-based sound artist. She majored in computer engineering and computer music. Accumulated her experiences in media art scene and art & technology education, she realized the cultures created by using technologies such as maker culture and media art are all male-centered. And the imbalance in using technologies is between not only gender but also other aspects like age, education and geographic location. To narrow this gap, she thinks that the community for people who isolated in technologies is necessary. W&T LAB developed workshop kits and workshop programs for kids and women and had several talks that suggest new perspectives on technologies in art. W&T LAB is located in Sewoon Maker's Cube now.