

## **MAKER: A Couple of Simple Projects for 8-12 STEM Outreach**

**Dr. Christopher P. Pung, Grand Valley State University**

Dr. Pung has interests in experiential learning, design processes and student teams.

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Abstract: This display will include materials used to introduce highschool students to microcontrollers and programming. Specifically, an arduino board was used to control a servo motor and a small DC motor. Small pinwheels were driven with the DC motors. Videos were used to explain in very basic terms how DC motors work. The arduino was demonstrated and then sample code was discussed and stepped through. The exercise was spaced out over two meetings of 45 minutes each. The students were very open to working with the arduino boards and were surprised with the ease of use. "I didn't think I could do this." , "Making the motor move was easy." and similar comments resulted.