

## Weekly report

### 1 *My Accomplishments this week*

#### 1.1 *Project 1: Massive Uniform Control*

- Kept exploring dynamics of particles
- Fish-tail like horizontal oscillation: not work right now
- Sperm-tail like rotation: maybe it'll work in future
- Gradient fields attraction: maybe it'll work in future
- Changed the relative positions of 4 steel cores to have more magnetic fields
- MATLAB and Arduino communication via serial port: fast real-time control with delay time in micro second scale. The delay used to be 10 ms via MATLAB servo motor control function