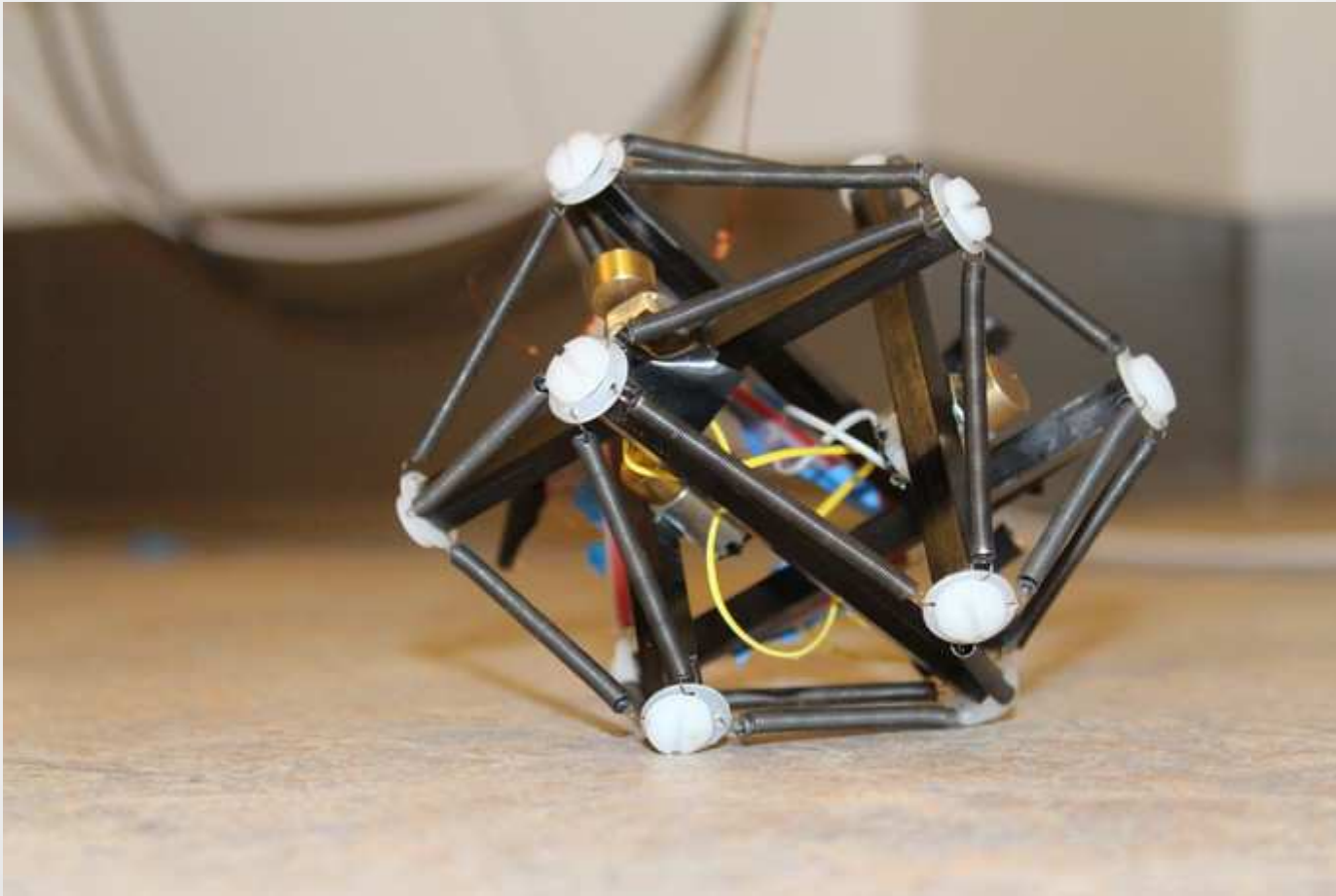


# Tensegrity Project Proposal

Steven Stangle  
May 27<sup>th</sup>, 2013  
ECE-497

# What is a tensegrity?



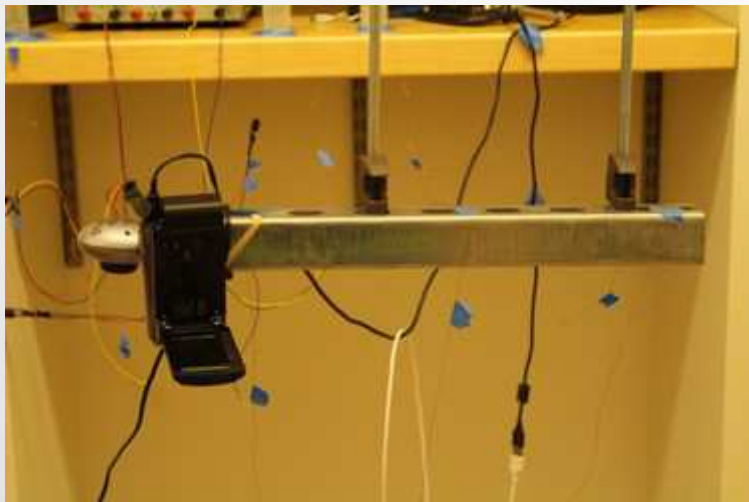
# Why are they useful?

- Branch of soft robotics.
- Can be used to reach places humans cant reach.



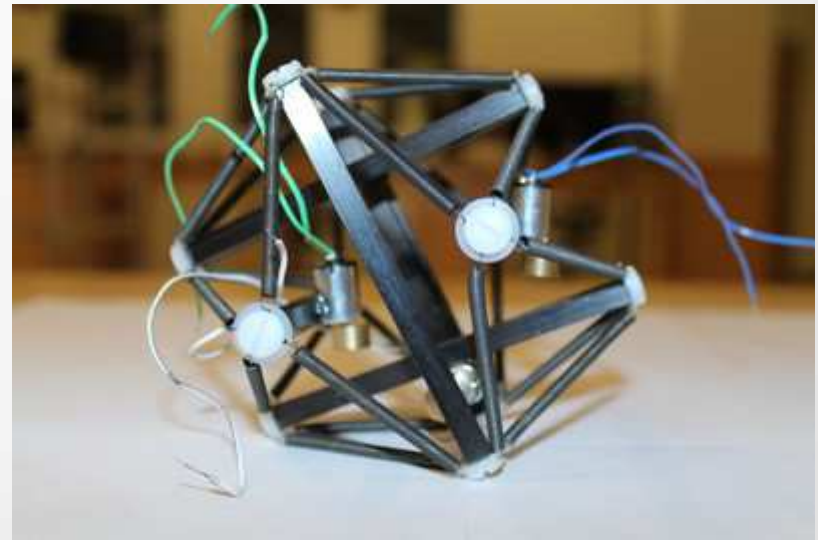
# Project Proposal

- Electrical Engineering
  - Designing a modular strut
- Computer Science
  - Hill Climber and Genetic Algorithms to learn motion



# What are the problems?

- Making the robot be able to move.
- Attached by a tether



# Electrical Engineering

- Properties of the Modular Strut
  - Self Powered
  - Self Processing
  - Self Sensing
  - Self Control
  - Central Wireless Logging



Arduino Micro



Super capacitor



MicroGearMotor



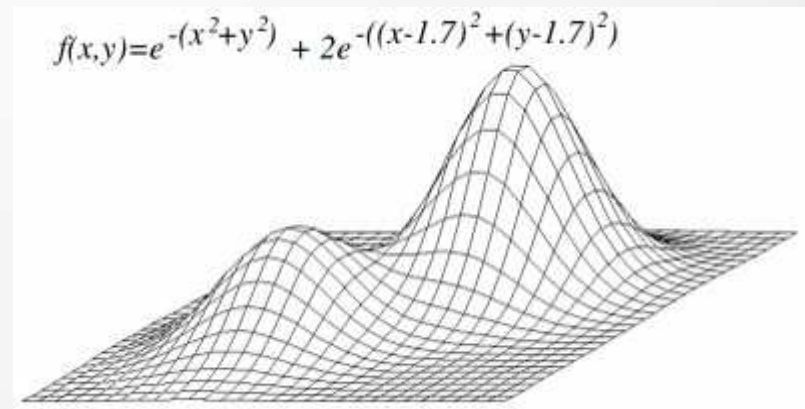
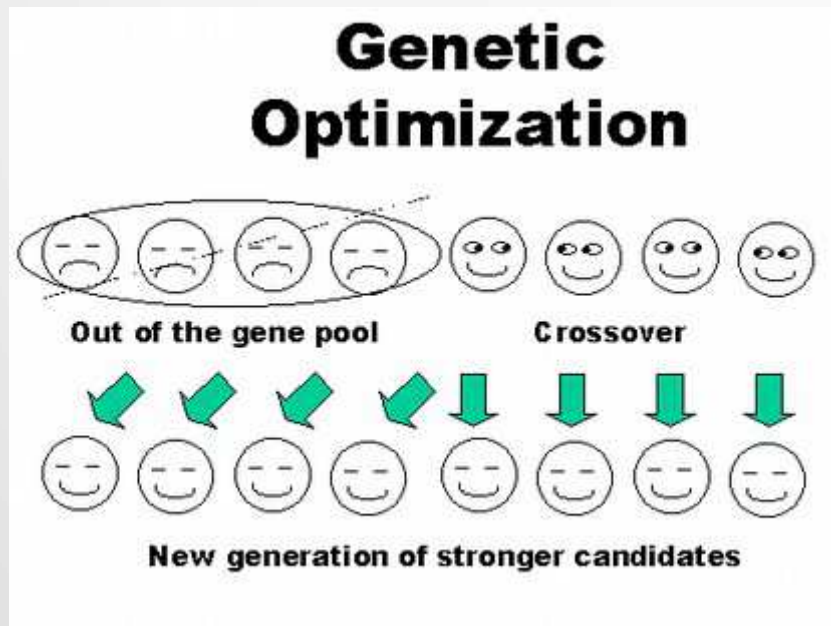
MinIMU



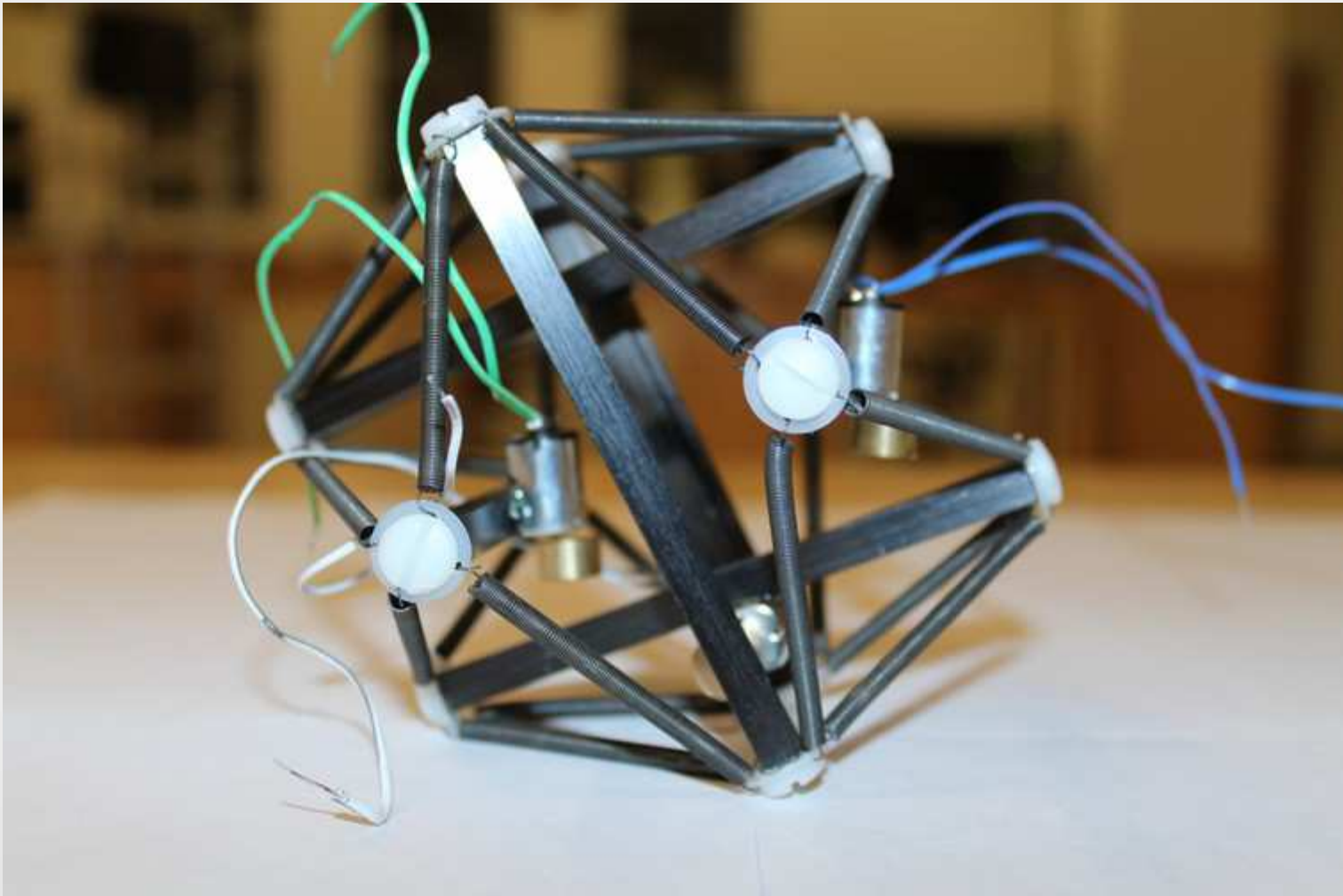
BlueSMiRF

# Computer Science

- Learning how to move.
  - Hill Climbing Algorithm
  - Genetic Algorithms



# Questions?



Thanks