

# Aaron Shelly

218 Grove Street | Bluffton, OH 45817 | (419) 296-2829 | shellyar@mail.uc.edu

## Education

B.A., **Physics and Mathematics**, Goshen College, Goshen, IN, May 2013

Overall GPA: 3.93 (on a 4.0 scale)

Course Highlights:

- Electronics
- Analytical Mechanics
- Statics
- Mathematical Modeling
- Game Theory

## Experience

*Maple Scholars – Physics Research Assistant* Goshen College, Goshen IN Summer 2013

- Studied the modes of vibration and harmonics of marimba bars.
- Measured modal frequencies using Digital Holography.
- Developed an FEA model that calculated modal frequencies by applying a load; simulating a bar being struck with a mallet.
- Used the FEA model to study the effect of thinning (tuning) marimba bars and verified with actual experimental data of thinned bars.

*Independent Research with John Buschert*, Goshen College, Goshen IN Fall 2012 – Spr. 2013

- Constructed an apparatus to measure electromagnetic intensity from a light bulb.
- Designed an experiment that used measured intensities to plot black body curves.
- Designed and constructed an apparatus to automate the Cavendish experiment.

*Student Laboratory Assistant*, Goshen College, Goshen, IN Fall 2010 – Spring 2013

- Helped set up labs for General Physics, Physical World, and Environmental Physics.
- Instructed and aided students during lab times.
- Graded work from labs and class work.

## International Experience

*Student and Service Worker*, Goshen College Study-Service Term, Senegal Summer 2012

- Studied French and Wolof language and culture in Thies while living with a host family
- Helped coach a local soccer team with youth from three small villages
- Cleaned and prepared a house to be used for an orphanage