

# Eric M. Laukkanen

362 Riverside Dr. 8C4  
New York, New York, 10025  
503 816 9220  
eml2181@columbia.edu

## EDUCATION

**Columbia University, New York, NY** G.P.A. 4.07/4.3 B.S. Mechanical Engineering (expected) 2014

**University of Puget Sound, Tacoma, WA** G.P.A. 3.77/4.0 B.S. Physics 2012

**Relevant Coursework (as of Summer 2013) :**

- Manufacturing Processes, Algorithms & Data Structures in Java, Fluid Mechanics, Mechanics of Solids, Thermodynamics, Electrical Engineering, Heat Transfer, Electromagnetic Theory, Quantum Mechanics, Circuits and Electronics, Statistical Mechanics, Analytical Mechanics, Statics, Dynamics, Analytical Chemistry, Systems Modeling, Graphics and Design.

## EXPERIENCE

**Research Assistant, Wong Group, Columbia University; New York, NY 2012-Present**

- Design and implement opto-mechanical solutions for senior researchers in a large optical nanostructure laboratory.

**Lead Adventure Guide, Tree to Tree Adventure Park; Forest Grove, OR 2012**

- Oversaw daily operation of Aerial Adventure Park.
- Coordinated staff rotations.
- Guided private zipline tours.
- Responsible for coordinating all potential rescue situations.

**Physics Researcher, University of Puget Sound; Tacoma, WA 2011**

- Investigated approaches for tuning eigenmodes in harmonic percussive beams.
- Research presented at 162nd ASA meeting, 2011. Published in POMA 2012.

**Teaching Assistant, University of Puget Sound; Tacoma, WA 2010-2012**

- Supervised freshmen and sophomore physics laboratories for two years.
- Reviewed relevant principles and answered student questions when necessary.

**Personal Technology Tutor; Tacoma, WA 2010-2012**

- Assisted a senior citizen with the woes and phobias of the digital age.
- Met twice a week for almost two years to work on email, word processing, digital photography, social networking, etc.

## RELEVANT SKILLS

- Creo/ProEngineer, SolidWorks, Matlab, FEA, MasterCam, Java, JavaScript, Python, HTML, LaTeX, MS Office.
- Fabrication: milling machine, lathe, 3D printer, laser cutter, molding/casting, welding, soldering, and other manufacturing processes.

## ACHIEVEMENTS

- Phi Beta Kappa National Honors Society, Engineers Without Borders, President of Physics Club, Society of Physics Students, Sigma Pi Sigma Physics Honors Society, NASA Space Grant Scholar, Varsity Soccer.

## REFERENCES

- Chee Wei Wong Sc. D; Professor of Mechanical Engineering. (212) 854-4275 cww2104@columbia.edu
- Randy Worland, Ph. D; Professor of Physics, U. Puget Sound. (253) 879 3815 worland@pugetsound.edu
- Zaixin Hong, Ph. D; Professor of Art, U. Puget Sound. (253) 879 3723 zhong@pugetsound.edu