

# Bailey-Ann Slaughter

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## Summary

Aspiring front runner in software development with over two years of active involvement in computational physics research and a passion for innovative contribution. Seeking opportunities, in the form of internships, to work alongside pioneering minds and develop skills instrumental to a prosperous future in an exponentially-growing field.

## Technical Skills

### **PROGRAMMING:**

Python, Scheme/Racket, HTML, CSS, PHP

### **SOFTWARE:**

Visual Studio IDE, Adobe Creative Suite 6, MS Office, Eclipse IDE

### **SYSTEMS:**

Linux (Ubuntu), UNIX, Windows (all), Macintosh OS X (basic)

## Professional Experience

### **RESEARCH ASSOCIATE | CENTER FOR EXPLORATION OF ENERGY AND MATTER | APRIL 2012 - PRESENT**

- Prototype high voltage electrodes viable to use in an experiment searching for the electric dipole moment of the neutron.
- Design and implement data-acquisition programs in Matlab for liquid helium cryostats linked to cryogenic temperature controllers and LabView.
- Constructed and tested components used in a magneto-gravitational potential well currently in use at Los Alamos National Laboratory in an experiment to measure the beta-decay rate of ultracold neutrons (UCN).
- Constructed a neutron beam chopper using an Arduino stepper motor, Aluminum chassis, and Gadolinium-coated disc; controlled remotely via Matlab Simulink and Arduino libraries.

### **UNDERGRADUATE INSTRUCTOR, PYTHON | INDIANA UNIVERSITY | JANUARY 2014 - PRESENT**

- Lead weekly laboratory section clarifying and demonstrating fundamental programming constructs in Python, modular programming, and general problem-solving techniques.
- Responsible for grading weekly assignments submitted by students in the lab section in a timely manner and offering constructive feedback based on individual performance.

### **SERGEANT, ARABIC CRYPTOLOGIC LINGUIST | INDIANA NATIONAL GUARD | JULY 2007 - PRESENT**

- Achieved one of the highest scores on the Defense Language Aptitude Battery in the state of Indiana.
- Awarded 5 Army Achievement Medals, 2 Reserve Component Achievement Medals, Military Outstanding Volunteer Service Medal, and two Certificates of Achievement since initial entry.

### **PEER TUTOR, PYTHON | INDIANA UNIVERSITY | SEPTEMBER 2013 - DECEMBER 2013**

- Provide concise interpretation and clarification of course material

## Education

### **BACHELOR OF SCIENCE | EXPECTED MAY 2015 | INDIANA UNIVERSITY**

- Computer Science, Specialization in Programming Languages
- Minor in Physics

### **ASSOCIATE OF ARTS DEGREE | NOVEMBER 2011 | DEFENSE LANGUAGE INSTITUTE**

- Graduated with Honors for exceeding course standard on the Final Exam
- Final GPA: 3.6