# **Catherine Weiss**

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#### **EDUCATION**

**Loyola Marymount University** 

Los Angeles, CA

Bachelor of Science, Applied Mathematics

Minor, Computer Science

**GPA 3.7** 

May 2017

## ACADEMIC AWARDS AND PROGRAMS

Honors College, LMU

Mathematics Grant, \$8,000

Dean's List

Sophomore Mathematics Scholarship, \$15,000

Academic Achievement Award, \$8,000 Semester Abroad, Cardiff University

Service Learning Leadership Award, 2017

### **SKILLS**

Programming: Java, Python, html, CSS, JavaScript, Matlab, Mathematica, LaTeX, SQL

Relevant Coursework: Data Structures, Algorithms, Complex Analysis, Real Analysis, Theory of Computation

# RESEARCH

Barista

**Thesis:** The Diffie-Hellman Key Exchange for Elliptic Curves

May 2017

• Implemented the Diffie-Hellman Key Exchange on the group structure of elliptic curves, advised by Dr. Khadjavi Summer Undergraduate Research Program, LMU May 2016 – August 2016

 Researched early mathematics education using data analysis, used STATA to implement algorithms comparing students

### Research Experience for Undergraduates (REU), CSUSB

June 2015 – August 2015

- Mapped hyperbolic knots to PSL2(Z)
- Presented findings in research paper and presentation at CSUSB
- Funded by the National Science Foundation to work with Dr. Trapp

#### PROFESSIONAL EXPERIENCE

New Avenues for Youth Portland, OR

Jesuit Volunteer; Education Specialist and Day Services Advocate

August 2017 – August 2018

August 2014 – May 2017

- Develop relationships and serve homeless youth (18-24 years old)
- Build curriculum and tutor GED students in mathematics, science, language arts, and social studies
- Live in an intentional community centered around four values of simple living, community, social and ecological justice, and spirituality

Grade Potential Los Angeles, CA

Mathematics and Computer Science Tutor

May 2017 – August 2017

Mathnasium Los Angeles, CA

Tutor May 2016 – August 2016

LMU Mathematics Department

Los Angeles, CA

Los Angeles, CA

Teaching Assistant January 2015 – May 2015

• Facilitated labs for "Mathematics of the Modern World" classes and taught Data Analysis on Excel.

Lion's Den CafeLos Angeles, CAManagerMay 2016 – May 2017SupervisorMay 2014 – May 2016

• Supervise staff of 50 people via creating work schedule, acting as liaison between student workers and LMU staff

 Manage café operations, including counting cash drawers and ensuring accuracy of money count, doing deposit drops, responding to unexpected difficulties