

# Ellen Persson

## Undergraduate Student

Third-year undergraduate pursuing an Engineering degree at UC Berkeley with experience in multiple relevant programming languages, as well as a strong foundational knowledge of data science and statistics and a passionate interest in mathematics. Competent instructor, with more than five years of experience engaging with students in STEM fields.



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## SKILLS

R

Python

Java

SQL

Data Analysis

Data Visualization

Matlab

Public Speaking

## LANGUAGES

English

*Full Professional Proficiency*

Swedish

*Full Professional Proficiency*

French

*Professional Working Proficiency*

## INTERESTS

Baking

Ultimate Frisbee

Dungeons and Dragons

## EDUCATION

### B.S. in Engineering Mathematics and Statistics

University of California, Berkeley

08/2018 - Present

GPA: 4.00

#### Courses

- Data Structures (A+)
- Discrete Math (A+)
- Concepts of Probability (A+)
- Principles & Techniques of Data Science (A+)
- Linear Algebra (A+)
- Numerical Analysis (A+)
- Introduction to Real Analysis (A)

## WORK EXPERIENCE

### Lead Teaching Assistant

UC Berkeley

08/2019 - Present

College of Letters and Science: Department of Data Science

#### Achievements/Tasks

- Instructed large groups of 60 students in weekly labs and smaller groups of ~6 students during discussion sections in programming and statistical concepts.
- Developed course content such as homework and projects designed to assess student knowledge and stimulate learning.
- Assisted in the restructuring required to move a course of over 1000 students fully online, including techniques to engage students in a new learning environment.

### Tutor

Kumon Math and Reading

06/2016 - 01/2019

An educational network to teach mathematics and reading primarily for young students.

#### Achievements/Tasks

- Worked with students between the ages of 5 and 15 to teach mathematics and critical reading skills.
- Trained four other tutors on techniques in student engagement and teaching style.
- Maintained database of students' scores on weekly homework assignments, quizzes, and examinations.

## ORGANIZATIONS

Tau Beta Pi Engineering Honor Society (01/2019 - Present)

UC Berkeley Women's Ultimate Frisbee Team (08/2018 - Present)

## PERSONAL PROJECTS

Basic version control system (11/2019 - 12/2019)

- Designed and implemented "Gitlet" in Java, a simpler version of the widely used software Git.
- Supported saving and restoring backups, viewing history, maintaining related sequences of commits, and merging changes made in different sequences.

Enigma Machine (10/2019 - 11/2019)

- Implemented a working Enigma machine, as invented by Alan Turing, to encode and decode messages in Java using various data structures to represent the physical parts of the original machine.