

# Kendrea Beers

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541-490-3848

## Summary

College student fascinated by the intersection of computer science, philosophy, and mathematics. Seeking a position in computing ethics to make sure that computers work for us, not against us.

## Education

### **Oregon State University (OSU)**

*Honors B.S., Graduating December 2021, GPA 3.98*

*Applied Computer Science and Philosophy with Minor in Mathematics*

Courses include: Honors Social and Ethical Issues in Computer Science; Discrete Mathematics; Data Structures; Physics of Contemporary Challenges; Numerical Analysis; Ethics; Buddhism, Nonviolence, and Social Justice

## Employment History

### **Teaching Assistant, Honors Energy IQ, OSU**

*January 2019 - March 2019*

Assisting Dr. Skip Rochefort with course design, co-leading class discussions, grading assignments, sharing student feedback

### **Research Experience for Undergraduates (REU) Intern, Data-Intensive Scientific Computing, University of Notre Dame Complex Networks Lab**

*May 2018 - July 2018*

With Dr. Tijana Milenkovic, improving the accuracy and performance of heterogeneous network alignment software by implementing exhaustive heterogeneous graphlet counting and designing a new homogeneous graphlet counting algorithm up to 10 times more efficient than the original (C++, GNU/Linux); completing a graduate-level Data-Intensive Scientific Computing course; attending computer science trainings, meetings, and other REU program events

### **Undergraduate Researcher, OSU mLab and SIMLab**

*June 2017 - March 2018*

With Dr. Yiğit Mengüç and Dr. Matthew Johnston, creating hardware and software systems for electrical characterization of liquid metal (MATLAB, Arduino, Python, Fritzing); designing, manufacturing, and documenting sensors for soft robotics (Autodesk Fusion 360)

### **Apprenticeships in Science and Engineering Intern, OSU mLab**

*June 2016 - August 2016*

With Dr. Yiğit Mengüç, designing and conducting experiments to optimize the durability of 3D-printed soft robots with material gradients (MATLAB, Autodesk Fusion 360)

### **Choir 2 Student Director, Heart of the Valley Children's Choir**

*September 2013 - June 2017*

Instructing and supporting 5th-8th grade singers

## **Achievements**

- Matchette Award for Undergraduate Essay of the Year in Philosophy from OSU School of History, Philosophy and Religion, 2019
- National REU Symposium, Washington, D.C., 2018 (approximately 1/10 applicants receive REU positions; 1/10 REU participants are nominated for the symposium; 1/3 nominees are chosen to attend)
- OSU Honor Roll and College of Engineering Dean's List, 2017-2019
- Effective Altruism Global Conference, San Francisco, 2017
- U.S. Presidential Scholar Candidate, White House Commission on Presidential Scholars, 2017 (1 of 70 nominees from Oregon)
- OSU Presidential Scholar, 2017 (most prestigious scholarship)
- Heart of the Valley Children's Choir Beth Powell Scholar, 2017 (most prestigious scholarship given every year)
- AP Scholar with Distinction, 2017
- National Merit Commended Scholar, 2017
- Three-week exchange trip to Germany, speaking exclusively German with host family, 2015
- Hugh O'Brian Youth Leadership Conference Oregon, 2015
- Kiwanis Club Community Leaders Workshop, 2015
- National Honor Society, 2015 and 2016
- Franklin Founders' Teal Award for Excellence in Academics, Athletics, and Leadership, 2013

## **References**

**Tijana Milenkovic, Ph.D.**, REU Mentor, University of Notre Dame  
tijana.milenkovic.1@nd.edu

**Douglas Thain, Ph.D.**, REU Site Program Director, University of Notre Dame  
dthain@nd.edu

**Willie "Skip" Rochefort, Ph.D.**, Professor, OSU  
skip.rochefort@oregonstate.edu