

# CLEO LEPART

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## Junior Physics Student

### CORE PROFICIENCIES

- |          |                            |                                     |
|----------|----------------------------|-------------------------------------|
| ▪ C++    | ▪ Technical Writing        | ▪ Differential Calculus             |
| ▪ Python | ▪ 3D Printing              | ▪ Linear Algebra                    |
| ▪ Excel  | ▪ Data Collection/Analysis | ▪ French, Spanish, Russian language |

### EDUCATION

#### Pursuing: Bachelor of Arts Degree in Physics

Currently attending University of California, Berkeley, August 2022 - Present  
*Dean's Highest Honors, GPA 3.8*

#### Activities

*President of SRJC Society of Physics Students, Fall 2020 – Spring 2021*  
*Physics conference and colloquia enthusiast*  
*Amateur tennis player and rock climber*

### RELEVANT COURSEWORK & SKILLS

- |                    |  |
|--------------------|--|
| <b>Programming</b> | <ul style="list-style-type: none"><li>▪ Experience with Python's numerical/graphing methods in online SPS-led Astrophysics course at Univ. of AZ</li><li>▪ Completed 1<sup>st</sup> and 2<sup>nd</sup>-semester C++ courses, Functions to Abstract Data Types</li><li>▪ Designed and fabricated 3D-printed mechanical stage parts for optical interferometry</li><li>▪ Applied Python data analysis methods, SciKit, AstroPy and database retrieval, SQLite, on spectroscopy data</li><li>▪ Completed online MITx: Introduction to Programming with Python</li></ul> |
| <b>Math</b>        | <ul style="list-style-type: none"><li>▪ Achieved an A as a summer student at UC Berkeley in Linear Algebra and Differential Equations</li><li>▪ Experience with Mathematica's 3D graphing in 3<sup>rd</sup> semester Multivariable Calculus</li></ul>  |
| <b>Physics</b>     | <ul style="list-style-type: none"><li>▪ Completed courses: Classical Mechanics, Thermodynamics &amp; Optics, Electromagnetism, Modern Physics</li></ul>  |

### PROFESSIONAL EXPERIENCE

#### AFFILIATE RESEARCH VOLUNTEER | Lawrence Berkeley National Laboratory, Berkeley, CA | June 2021 to Present

- As a DOE Summer Undergraduate Laboratory Intern, I began work on the Dark Energy Spectroscopic Instrument project, to detect outlier, anomalous multi-messenger and tidal disruption events purely through cosmological spectroscopic data
- Self-taught familiarity with statistical analysis, numerical data analysis in Python, AstroPy, and SQLite for database communication

#### PHYSICS TEACHING ASSISTANT | Santa Rosa Junior College | January 2020 – May 2022

- Provides guidance and direction via group and individual tutoring to improve STEM and analytical skills for students in math and physics
- Developed supplementary coursework for Intermediate Algebra, Electromagnetism, Classical Mechanics, responsibility for non-exam grading

#### ASSISTANT PRODUCER | Old Navy, San Francisco, CA | September 2015 to January 2019

- Employed for ability with spreadsheet and data management in Excel in office and on location
- Created scripts and contributed improved processes for data-entry accuracy and data manipulation in Excel

#### ESOL & RUSSIAN INSTRUCTOR | International Institute for Management, Algiers, Algeria | February 2014 to February 2015

- Responsible for teaching grammar, conversation, reading and writing to adults and adolescents of all levels
- Designed curriculum tailored to specific goals: e.g. improving idiomatic understanding, increasing scores on standardized English language exams

#### FURTHER LANGUAGE EXPERIENCE |

- Attended University College London for 3 semesters (2011 – 2012) in the Russian program at the School of Slavonic & Eastern European Studies
- Lived in Paris for 3 years, becoming fluent in French, earning certificates in French, Arabic and French-to-English translation
- Studied Russian at private and public schools in Russia, St. Petersburg (2010) and Kazan (2012)