

# Taylor J. Larrechea

PHYSICIST · COMPUTER SCIENTIST · PROBLEM SOLVER

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## Education

### University of Colorado

*Boulder, CO 80309*

B.S. IN APPLIED COMPUTER SCIENCE

*May. 2023 - Present*

- Currently attending CU Boulder's online post baccalaureate Applied Computer Science program.

### Colorado Mesa University

*Grand Junction, CO 81501*

B.S. IN PHYSICS, MINOR IN MATHEMATICS

*Aug. 2016 - May 2020*

- Graduated with Honors Cum Laude distinction, with a GPA of 3.71 out of 4.00.
- Selected for membership in the prestigious  $\Sigma\Delta\Pi$ ,  $K\kappa E$ , and  $\Sigma\Pi\Sigma$  honor societies.

## Experience

### Applied Materials

*Hillsboro, OR 97124*

CUSTOMER ENGINEER

*Oct. 2022 - Present*

- Applied technical expertise to perform comprehensive tasks pertaining to defect metrology on cutting-edge Intel R&D CPUs.
- Managed the upkeep of multiple machines, including performing preventive and corrective maintenance along with troubleshooting tasks.
- Wrote Python scripts to automate repetitive processes and improve daily workflow.
- Demonstrated strong organizational skills by efficiently managing parts and keeping track of incoming and outgoing inventory.
- Invested in personal and professional development by completing trainings and earning certifications.

### University of Oklahoma

*Norman, OK 73071*

INSTRUCTOR OF RECORD

*Aug. 2021 - Aug. 2022*

- Led lectures for groups of up to 26 students, demonstrating strong public speaking and instructional abilities.
- Demonstrated ability to explain complicated ideas in mathematics, logic, procedures, and physics at an understandable level.
- Created useful lecture notes and supplementary materials to enhance daily lessons.
- Developed and administered exams to assess understanding of key topics in introductory physics.
- Demonstrated strong time management skills by grading and returning up to 26 exams within a 24-hour timeframe.

### Mesa Lavender Farms

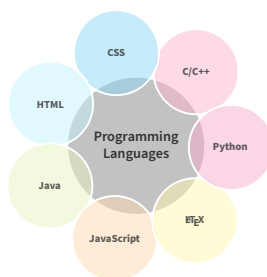
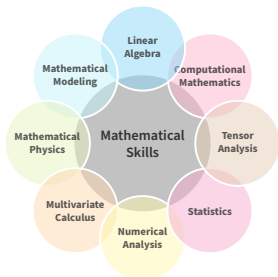
*Grand Junction, CO 81501*

FORMULATION SCIENTIST / SOFTWARE DEVELOPER

*Jun. 2020 - March. 2021*

- Applied chemical expertise to create innovative cosmetics and accurately formulate recipes for a variety of products.
- Applied automation to increase efficiency and reduce the workload of operational tasks on machines.
- Demonstrated a strong understanding of safety protocols while working with toxic chemicals on a daily basis.
- Utilized JavaScript to create a desktop application that streamlined the management of MLF's product recipes.
- Utilized Word Press to manage and maintain the company website on a daily basis.

## Qualifications



## Projects

### Celestial Bodies In Space - 🖨

DEVELOPER

- Through the use of Python and numerical methods, the equations of motion for a ternary star system were successfully solved and plotted, providing valuable insights into the dynamics of the system.

### Formulator Pro - 🖨

DEVELOPER

- Implemented and maintained a cross-platform recipe generation application for Mesa Lavender Farms, leveraging programming skills, utilizing the Electron JS framework, and optimizing source code to enhance user experience.

### RSA - 🖨

DEVELOPER

- Developed a GUI program with the use of PyQt6 that demonstrates the process of RSA encryption and decryption.