

Jemma Lofy
They/Them
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(661) 444-4630

programming Python, Rust, JavaScript, LaTeX, HTML, CSS, Mathematica, MatLab

hardware Arduino, analogue and digital circuit design, antenna design, CAD design, rapid prototyping

education

2013-2017 **CALIFORNIA STATE UNIVERSITY, BAKERSFIELD** **BAKERSFIELD, CA**
Physics major, Mathematics minor
President of Club Gender Equality Now, founding chapter member for Society of Physics Students on campus

experience

2017-2020 **EXPLORATORIUM** **SAN FRANCISCO, CA**
Museum Educator
Led educational demonstrations and introductions for large groups into the museum

- Handled reservations for field trips and events within the museum
- Hosted talks and demonstrations on a variety of scientific phenomena

2013-2018 **CALIFORNIA STATE UNIVERSITY, BAKERSFIELD** **BAKERSFIELD, CA**
Lab Manager
Developed and led laboratory lessons for college aged and younger students.

- Wrote lab sections for quantum mechanical phenomena
- Hosted daily lab sessions for students of all ages and local high school teachers

2013-2018 **CALIFORNIA STATE UNIVERSITY, BAKERSFIELD** **BAKERSFIELD, CA**
Research Assistant
Created computational models for petroleum engineering and advanced photonics

- Wrote software visualizations for calculations to lead in the discovery of novel phenomena for publication

2006-2013 **IN AND OUT TRAFFIC SCHOOL** **STOCKTON, CA**
SEO Analyst
Analyzed SEO information to generate effective ad strategies with Bing, Google Adwords, and Yahoo Ads

- Created data backed strategies for the use of ads with a \$40k monthly ad budget
- Performed A/B tests to improve advertising and optimize budget uses

publications

2020 **Complex Faraday & Kerr Rotations in Right & Left Handed Films**
J. Lofy, Vladimir Gasparian, Zhyrair Gevorkian, Esther Jódar. *Reviews on Advanced Materials Science*

2017 **Time Dependent Faraday Rotation**
Zhyrair Gevorkian, Vladimir Gasparian, J. Lofy. *Laser Physics*

2015 **Faraday Rotation in Thin Metamaterial Films,**
Vladimir Gasparian, Zhyrair Gevorkian, J. Lofy. *Semiconductor Micro- and Nanoelectronics: Proceedings of the Tenth International Conference*

volunteering

2016-Now **Article Referee for: Applied Physics Letters—Photonics, Applied Optics, The Review of Scientific Instruments**
Reviewed a series of articles on the topic of Faraday rotation and it's application in photonics

2017-2018 **Antenna Specialist for San Francisco SUDO Mesh**
Helped in the design and installation of antenna