Lane E. **Schultz**

45 N. Orchard St., Apt. 207, Madison WI 53715, USA

(+1) (806)-678-6904 | LaneEnriqueSchultz@gmail.com | leschultz

Education

University of Wisconsin - Madison (UW-Madison)

Madison, WI

Material Science and Engineering PHD

Sep. 2018 - Ongoing

- Distributed Minor: Machine Learning Courses
- Cumulative GPA: 3.625

Fort Lewis College (FLC)

Durango, CO

Bachelors of Science in Engineering

Aug. 2013 - Dec. 2017

- Student Marshal
- Concentration: Electro/Mechanical
- Minor: Mathematics
- Cumulative GPA: 3.99

Experience

Quantifying Metallic Glass Forming Ability through Machine Learning, UW-Madison

Madison, WI

Gathered physical properties of metallic glasses for supervised learning.

Jun. 2018 - Ongoing

- Wrote python scripts to gather data on metallic alloys generated through molecular dynamic simulation
- Used standard machine learning techniques to learn glass forming ability of several metals

Summer Undergraduate Research Experience (SURE) 2017, UW-Madison

Madison, WI

Wrote an image generation tool with Python and Bash scripts

May. 2017 - Aug. 2017

- **Presented**: "Tools for Standard Visualization of DAGMC Radiation Transport Results"
- Implemented command line tool for standard, automated image views of data sets

Capstone Design Project - Exotic Propulsion Test Stand, FLC

Durango, CO

Designed and developed a 10 μN torsional test stand

Sep. 2016 - Apr. 2017

- **Published AIAA:** "Design of Torsional Test Stand for Micro-Newton Force Detection"
- Implemented electrostatic displacement mechanism and modeled system response

Summer Undergraduate Research Fellowship (SURF) 2016, Purdue University

West Lafayette, IN

Operated an X-ray imaging system for two dimensional analysis of sprays

May. 2016 - Aug. 2016

- **Presented**: "Optimization of a High-Speed X-Ray Imaging System for Studying Sprays"
- Operated pressure vessels, X-ray tube sources, and high-speed cameras

Design Project - Water Quality Survey Device, FLC

Durango, CO

Designed and developed a water quality measuring device

Dec. 2016 - Apr. 2016

- **Published OCEANS 16**: "Development of a Portable Water Quality Sensor for River Monitoring from Small Rafts"
- Measured temperature, ORP, pH, time, and GPS location through an interchangeable sensor package

Computer Software

- Coding: C++, Python, Verilog, and MATLAB
- Documentation: LaTeX
- Drawing: AutoCAD, SolidWorks
- OS: Kubuntu, CentOS

Teaching Assistant and Tutor

- Thermal and Fluid Systems Laboratory
- Engineering Fundamentals II (MATLAB)

Societies, Conferences, and Awards

Fort Lewis College	Sigma Pi Sigma (Physics Honor Society)	*Durango, CO*
Fort Lewis College	Order of the Engineer	*Durango, CO*
Fort Lewis College	Deans' Council Freshman 4.0 Award and Certificate	*Durango, CO*
Fort Lewis College	Freshman Chemistry Recognition Award	*Durango, CO*

Languages

Bilingual	Fluent in Spanish and English