

# Mac Greene

👤 macgreene.com   ✉ macgreene14@gmail.com   📞 (+1) 706.768.6743   🔗 LinkedIn   🐙 GitHub

---

## EDUCATION

**FORT LEWIS COLLEGE** | B.S. IN ENGINEERING  
August 2015 - April 2019 | Durango, Colorado

**GEORGIA TECH** | WEB DEVELOPMENT BOOTCAMP  
July 2022 - December 2022 | Atlanta, Georgia

## SOFTWARE

HTML • CSS • Git • Javascript • React.js • Next.js • Express.js • MySQL • MongoDB • Python • Django • Jira

## EXPERIENCE

### **NEXTRACKER** | PROJECT ENGINEER

February 2020 - August 2022 | Nashville, TN

- Facilitated the design of 1+ gigawatts of utility solar from initial bidding to site construction
- Collaborated with civil, electrical and structural engineering groups to produce comprehensive site plans
- Oversaw the introduction of the NX Gemini product, established design tools, processes and documentation
- Developed novel software tools to streamline engineering workflows including site design and solar performance modeling

### **SANDIA NATIONAL LABORATORY** | SOFTWARE DEVELOPMENT

July 2018 - April 2019 | Durango, CO & Albuquerque NM

- Designed and assembled a remote sensing device for monitoring irradiation, air composition, and acceleration
- Created a python script for storing timestamped sensor data, piped to an online visual dashboard
- Developed a script to automate the creation of Finite Element Analysis (FEA) models from user-specified design parameters
- Performed a parametric investigation of the nonlinear structural response for a cantilevered beam using custom software
- Successfully applied machine learning techniques to predict failure in structural model given loading parameters

### **FORT LEWIS COLLEGE** | DESIGN & WEB DEVELOPMENT

January 2018 - April 2018 | Durango, CO

- Prototyped a solar-powered flow rate measurement device for monitoring water systems located in remote locations
- Developed web-based system for analyzing & visualizing municipal water quality data collected via a wireless sensing device
- Designed a website for viewing water data in real-time, put to use by firefighters during the Durango 416 fire

### **CORNELL UNIVERSITY** | MATERIALS SCIENCE

June 2017 - July 2017 | Ithaca, NY

- Designed a loading fixture capable of placing test samples in 3-point and 4-point bending loading scenarios
- Created an FEA model of a structure undergoing bending, validated model with non-destructive stress measurements
- Generated a final report and presented to a panel of researchers

### **VILLAGE AID PROJECT** | DESIGN & PROJECT MANAGEMENT

September 2015 - May 2019 | Durango, CO

- Implemented a cloud-based data aggregation platform for surveying access to water services
- Designed a gravity-fed water system, serving 1000's of individuals in rural Nicaragua with running water
- Directed a team of students in the construction of 3 reinforced concrete water storage tanks in Myanmar