# **BENJAMIN PIERCE**

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#### **EDUCATION**

### Case Western Reserve University

**BS** Computer Science

Aug 2017 – May 2021 Cleveland, OH

- GPA: 3.6
- · Coursework: Algorithms, Databases, Data Structures, Intro. Artifical Intelligence

#### **WORK EXPERIENCE**

## Solar Lifetime Durability Extension Center

Research Assistant

Aug 18 – Present Cleveland, OH

- Research focus is on computer vision applications for materials
- Other duties include solar module fabrication, testing, and analysis.

## Peth's Landscaping

June 2015 – Aug 2018

Landscaper Strongsville, OH

• Summer job as a landscaper, responsibe for mulch, planting, mowing, trimming, etc.

### SKILLS

- Programming Languages: Python, R, Java, C
- · Libraries: sklearn, skimage, scipy, openCV, pandas
- Technologies: MySQL, Hadoop, Linux, SLURM/HPC
- Training: Basic lab safety, high-voltage, high-pressure

#### **PROJECTS**

# Image Processing on substrate formation on Ni-Al alloys

Used computer vision techniques to quantize substrate growth rate on electromagnetically levitated, molten droplet of Ni-Al. Successfully confirmed theoretical behaviour through a purely data-driven approach

## Unsupervised Machine Learning on electroluminescence images

Used machine learning to idenfity and classify degredation types in EL images of solar cells in order to impartially seperate modes of failure and computationally detect reasons for power loss

#### AWARDS

### **SURES Scholar**

Awarded grant funding for summer research

May 2019 CWRU SOURCE

### Choose Ohio First Awardee

Recognized for STEM skills and awarded scholarship

Aug 2017 State of Ohio

# Dean's High Honors

Made Dean's list for academic success

Aug 2017-CWRU