

# Maximo Machado

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## EDUCATION

**Massachusetts Institute of Technology | GPA: 5.0**  
Bachelor's Degree in Computer Science and Engineering

September 2019 – May 2023  
Cambridge, MA

## WORK EXPERIENCE

### Integration Engineering Intern

Finisar Corp.

June 2018 – August 2019

Sherman, TX

- Worked in ISO 4 cleanroom developing applications to improve efficiency and creating specs
- Employed metrology and microscopy for failure analysis and developing process for wet etching
- Member of Emergency Response Team

### Laboratory Assistant

North Lake College

January 2016 – July 2016

Irving, TX

- Inventoried and maintained Physics Department lab equipment
- Physics tutoring

### Assistant Manager

Sun & Ski Sports

December 2006 – August 2015

Austin, TX

- Led a team of 20+ employees
- Ran social media, as well as all grassroots marketing

## PROJECTS

### Surface Plasmon Propagation in the Kretschmann-Raether Configuration | *Python*

University of Eastern Finland

Fall 2020

### Simulation of Vector Beams Through High Numerical Aperture Lens | *Python*

University of Eastern Finland

Fall 2020

### Characterization of the Flame-S Spectrometer for Spectral Imaging Research

University of Eastern Finland

Spring 2020

### Free Form Lens Systems for 3D Printing | *MATLAB, OpTaliX*

University of Eastern Finland

Spring 2019

### Procedures for Plating and Wet-Etching in III-V Semiconductor Devices

Finisar Corp.

Summer 2019

### Photo-Filter Characterization for Photometric Identification of Be Stars

Austin College

Fall 2017

### Improved Calibrating Equations for Volumetric Soil Moisture Measurement

Austin College

Spring 2017

### Product Design, and Manufacturing Using 3D Printing | *Autodesk 123D*

Austin College

Fall 2016

## SKILLS

**Languages:** English (Native), Spanish (B1), Finnish (A1)

**Programming:** Python (NumPy, SciPy, Matplotlib, Pandas), MATLAB, Mathematica, Java

**Document Creation:** Microsoft Office Suite, LaTeX, Markdown