

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