

# Pablo Salamanca

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## PROFESSIONAL EXPERIENCE

### Amazon

Seattle, WA

*Software Developer Engineer Intern (Ads, Sponsored Brands Video)*

May 2023 – August 2023

- Conducted research, development, and testing of Fast Fourier Transform-based blurriness detection algorithms using Python and OpenCV.
- Created an entirely new AWS Lambda-backed API deployed through CDK bringing the aforementioned algorithms into production. (API Gateway, Docker)
- Played a key role in enhancing the performance of the video advertising pre-moderation flow by improving blurriness analysis latency and subjectivity.

### Oliver Space

San Francisco, CA

*Software Engineering Intern*

May 2022 – August 2022

- Developed internal tooling for customer experience.
- Won internal hackathon by redeveloping website experience (React.js, Vue.js).
- Contributed to backend logistics codebase (Ruby on Rails).

### Monarch Tractor

Livermore, CA

*Mechatronics Engineering Intern*

February 2020 - June 2020

- Tasked with incorporating stereo depth cameras to route mapping algorithm (Python, C++).
- Developed Power Take-Off hand-protection software using computer vision (OpenCV).
- Fragmented computing hardware using NVIDIA Jetson Nano.

### Canal 13

Santiago, Chile

*Web Developer*

January 2018 – March 2018

- Developed a website for a new division of Canal 13 centered around robotics and technology.

## EDUCATION

### University of Pennsylvania

Philadelphia, PA

*Bachelor of Science in Engineering, Computer Science*

Expected Graduation: 2025

GPA: 3.7/4.0, Penn Quant Trading Club (Advanced Team)

### Andrée English School

Santiago, Chile

*High School Diploma*

GPA: 6.9/7.0

## PROJECTS AND COMPETITIONS

### Robotics

*Recruited by a joint team from top Chilean universities to participate in Tokyo two times.*

- 2x Gold Medal, Competencia Robótica UTFSM (2017, 2019)
- Silver Medal, Competencia Robótica UTFSM (2018)
- 21st Place, All Japan Micromouse and Robotracer Contest (2018)
- 57th Place, All Japan Micromouse and Robotracer Contest (2017)

Valparaíso, Chile

Tokyo, Japan

### Trading Bot

- Created a periodic portfolio rebalancer using Wharton Research Data Services, TD Ameritrade API, and Python.

### Wireless Laser-Gate Track & Field Timing System

- Created ultra-affordable wireless timing system for Track & Field athletes and coaches.
- Published all the code, PCB designs, 3D CAD designs, and instructions for free on Hackster.io and Arduino Project Hub. Project was very well received by the local and online community.

### Mathematics Olympiad

- Gold Medal National Mathematical Triathlon, Universidad San Sebastián.

## ADDITIONAL SKILLS

- Proficient in Python, Java, C (Arduino), C++, Javascript (React, Vue), HTML/CSS, Ruby on Rails, PCB Design (Autodesk EAGLE), Embedded Systems, 3D Modelling (Fusion 360, Autodesk Inventor), Welding and Metalworking
- Fluent in English and Spanish