# **Alonso Morales**

Mobile: 773-226-1176 Email: <u>j27morales@gmail.com</u> Portfolio

### Education

Illinois Institute of Technology - Chicago, IL

Anticipated Graduation: May 2025

Major: B.S in Computer Science GPA: 3.3/4

## Work Experience \_\_\_\_\_

DuckieBot Intern - Toyota Technological Institute at Chicago

Jun 2019 - Jul 2019

- Built a duckiebot, a small robot with the aim of creating an autonomously driving community
- Tested the duckiebot's driving capabilities with remote control
- Programmed a script to be able to send a signal from the laptop to the duckiebot

Technology Management Intern - Lindblom Math & Science Academy

Jun 2018 - Aug 2018

- Organized desktops, laptops, and tablets
- Installed any necessary software and updated software.
- Kept track of inventory on school technology: Computers, laptops, projectors etc

#### Extracurricular \_\_\_\_\_

Lead Programmer - FIRST Robotics Lindblom Electric Eagles

Oct 2017 - May 2021

- Organized and structured the goals of the programming team ultimately resulting in regional championship out of 40 teams
- Helped plan lessons to teach the new members of the programming team (4-8 people in the team)
- Programmed the robot for competitions implementing various functions including:
  - A self-leveling elevator mechanism to allow the robot to climb any of 2 unique platforms
  - A python computer vision system to track yellow balls for autonomous collection
  - An autonomous routine that allows the robot to shoot 3 balls at a target then collect 3 more balls
  - A flexible state machines that allowed us to create various autonomous paths and routines for the robot to execute

Lead Graphic Designer- FIRST Robotics Lindblom Electric Eagles

Oct 2017 - May 2021

- Designed the team's logo and shirts for every season
- Designed and created other team apparel like buttons and stickers

#### Courses\_\_\_\_\_

Introduction to Drafting, CAD & CAM - Lindblom Math and Science Academy

Jul 2020 - Aug 2020

- Drafted objects in isometric view, both by hand and with software
- Sketched and modeled objects in CAD
- Created toolpaths using CAM to manufacture parts

Game Design and Development - Lindblom Math and Science Academy

Sep 2018 - May 2021

- Ideated and planned games either individually or in a team
- Designed assets for the games, including art and sound
- Programmed and developed games using Java

Data Structures and Algorithms - Illinois Institute of Technology

Jan 2021 - May 2021

- Used various data structures to organize data and implemented algorithms to efficiently search through that data
- Applied those data structures and algorithms in a project to organize a book in alphabetical order

### Awards\_

Lindblom Highschool Senior CTE Award

June 2021

• One of two students out of 150 selected based on CTE achievements and academics

IIT Dean's List Feb 2022