# NATHAN **FONG**

nathanfong.plux@gmail.com

(626) 800-8250

pluxie.github.io/NathanFong

Student with nine years of experience in FIRST robotics programs. Consistently working in building and design. Strengths in Computer Aided Drafting. Currently majoring in Architectural Engineering at Oregon State University.



**SUMMARY** 

Walnut, California

in linkedin.com/in/NathanFongPx

#### SKILLS

Software: AutoCAD, Revit, Rhino, Grasshopper, Creo, Fusion 360, Inventor, Maya, Lumion 4.0, Microsoft applications, Google applications

Language: Python, HTML,

CSS, and Java

### **EDUCATION**

**Bachelor of Science:** 

Architectural Engineering Expected in 06/2026

Oregon State University Corvallis, OR • (GPA: 3.44)

Walnut High School Walnut, CA • Graduated 05/2022

#### CERTIFICATIONS

Konami Judge Program Level 1 Judge Hawthorne, CA • 03/2024 Project Lead The Way

**Computer Science** Scholar Student Certificate Walnut, CA • 05/2022

EAST SAN GABRIEL VALLEY REGIONAL OCCUPATIONAL **PROGRAM** Computer Aided Drafting/Design/ **Architectural Drafting** 

### **CLUBS**

 ASCE Architectural Engineering Institute, 2022 - Current

Walnut, CA • 05/2021

- Oregon State Combat Robotics, 2022 - Current
- OSU General Engineering Club, 2022 - Current
- Member of FIRST Tech Challenge Robotics Team, 2017 - 2022
- Member of FIRST LEGO League Robotics Team, 2013 - 2017
- eSports Communication Staff and Club Cabinet Officer, 2018 - 2022

## **WORK EXPERIENCE**

Julia Y. Chen Design Inc. - Summer Architectural **Drafting Project** 

Fairfax, CA • 06/2021 - 07/2021

 Initial Design and Layout of an Accessory Dwelling Unit using Autodesk Revit and AutoCAD

#### **TECHNICAL COURSES**

- ARE 341 FUNDAMENTALS OF HEATING, **VENTILATING, AND AIR CONDITIONING (HVAC)**
- ARE 441 HEATING, VENTILATING, AND AIR **CONDITIONING (HVAC) DESIGN 1**
- ARE 361 FUNDAMENTALS FOR LIGHTING DESIGN
- ARE 499 SPECIAL TOPICS: ST/ PARAMETRIC DESIGN
- ARE 310 ARCHITECTURE STUDIO
- CE 382 STRUCTURAL THEORY 2
- CE 381 STRUCTURAL THEORY 1
- CEM 472 MECHANICAL FACILITIES CEM 442 BUILDING CONSTRUCTION MANAGEMENT
- CCE 321 CIVIL AND CONSTRUCTION ENGINEERING MATERIALS
- CCE 203 VIRTUAL DESIGN & CONSTRUCTION
- CCE 201 GRAPHICS & DESIGN
- ENGR 213 STRENGTHS OF MATERIALS
- ENGR 212 DYNAMICS
- ENGR 211 STATICS
- ST 314 INTRO TO STATISTICS FOR ENGINEERS
- ENGR 103 ENGINEERING COMPUTATION AND ALGORITHMIC THINKING
- ENGR 102 DESIGN ENGR & PROBLEM SOLVING
- ENGR 100 THE OSU ENGINEERING STUDENT
- PH 211-213 GENERAL PHYSICS WITH CALCULUS

### OTHER TECHNICAL EXPERIENCE

Robot Build and Design Committee Captain FIRST Tech Challenge (FTC)

Walnut, CA • 05/2017 - 05/2022

- Volunteered for over 12 FLL and FTC events in various positions.
- Publicly presented at 30+ events for outreach and demonstrations.
- Successfully managed weekly deliverables in robot design.

**Robot Build Committee Captain** FIRST LEGO League (FLL) Walnut, CA • 05/2013 - 05/2017

- Directed votes to unify designs from all teammates into the robot.
- Designed and built major components of the robot.

# **ACCOMPLISHMENTS**

- LAFTC Championships Dean's List Award Semi-Finalist Winner, 2020
- FTC Raytheon Technologies Innovate Awards, First Place, 2018, 2019 and 2022 - Impressed judges with unique utilization of LEGO parts in a typically aluminum design environment.
- Advancement to FTC Super Regional Championship, 2018
- Advancement to FTC Regional Championships, 2018, 2019, 2021, and 2022
- FTC Robot Game Winning Alliance Captain, 2018 FLL Regional Championship Inspiration Award, 2017
- Advancement to FLL Invitational Championship, 2017
- Advancement to FLL Regional Championships, 2014-2017
- 2015, 2016

FLL Qualifying Tournament - Champion's Awards,