JOHNPAUL VELA

SOFTWARE DEVELOPER

CONTACT

714-862-0366

johnpaul.vela@eagles.cui.edu

Portfolio Website

LinkedIn

Orange County, CA

EDUCATION

- **BACHELOR OF SCIENCE IN COMPUTER SCIENCE**

Concordia University Irvine

- Dec 2025

GPA: 3.81

LANGUAGES

- **English** - fluent
- **Spanish** - fluent
- **Mandarin Chinese** - beginner

COURSE WORK

- **CSC212** Data Structures and Algorithms
- **CSC316** Intro to Networking
- **CSC318** Object Oriented Programming
- **CSC105** Web Design
- **CSC210** Intro to Operating Systems

SKILLS

Programming | Python - Java - C# - C - PHP - **JavaScript** - Shell - Mips Assembly

Web | **HTML** - **CSS** - MySQL - Node.js - TCP/IP - Heroku - Google Cloud

Frameworks | Bootstrap - Flask - Keras - React - NumPy - Pandas - Tensorflow

Tools | Linux - Visual Studio - VS Code - GitHub - **Paint.Net**

Concepts | Embedded Systems - Electronics - Data Structures - Operating Systems - Neural Networks - Computer Networking

EXPERIENCE

Parkinson's Data Processor | Aug 2024 - present

A web-based tool to generate PDF reports based on data collected by the Concordia University Irvine Lifestyle and Parkinson's Longitudinal Study.

- Takes a CSV file of data collected on 100+ patients
- Dynamically fill in and interpret data into digestible information as a PDF file
- Developed backend using Python Flask and JSON to define the structure and interpretation logic

Home Automation | Apr 2023 - Jun 2023

A Raspberry Pi and Arduino project to control lights, window blinds, and security camera from a web app/voice control.

- Developed using Python3 and NodeJS on Linux
- Motor and light control for blinds and lamps
- Developed live security video feed for web front-end
- Trained a custom LSTM for task classification using Keras
- Real-time audio processing for custom CNN wake word detection

Panora | Sept 2022 - Nov 2022

A web-based tool to store and preview research sources as well as keep notes.

- Developed backend using Node.js, Express.js, MySQL, and hosted on Heroku
- Uses Puppeteer to screenshot sources and send it back via a REST API
- Developed front-end using ReactJS and the Bootstrap framework

Robotics and Lead Web Programmer | Team 3476 Code Orange | Aug 2018 - Aug 2021

- Redesigned the team website to implement the Bootstrap framework, allowing for easy expandability and an improved UX.
- Programmed robot subsystems, such as intakes and elevators, using WPILib in Java. Made use of encoder inputs, motors, current spikes, solenoid valves, and PID controllers.
- Built a scouting system to track and display all 50+ teams' performance metrics throughout competitions, aiding alliance decision-making. Developed using HTML, JavaScript, CSS, PHP, and MySQL