# Pedro Pachuca

Github Website Contact LinkedIn pedritopachuca@me.com Information **W**но Ам I I am an avid coder, computer enthusiast, teacher, quizbowler, and soccer player. EDUCATION Amador Valley High School, Pleasanton, CA

High School Diploma Expected: Summer 2019

• Weighted GPA: 4.4 • Uneighted GPA: 3.9

Online Coursework All Passed with A grade

Mechanics: Kinematics and Dynamics by MIT, Summer 2017

Cyberwar, Surveillance, and Security by University of Adelaide, Summer 2017

Computation Structures 1: Digital Circuits by MIT, Early 2017

Introduction to Real-Time Systems by IEEE, Winter 2016

Introduction to Linux by LinuxFoundation, Summer 2016

Las Positas College, Livermore, CA. GPA: 4.0

Computer Information Systems 50

#### iOS Development SKILLS

Proficient in Swift and Objective-C.

### Web Developmentt

Proficient in HTML, CSS, and JavaScript. Familiar with PHP and SQL.

# Scripting

Familiar with Bash, PowerShell, and UNIX Shell scripting.

## General Use Languages

Proficient in Java and Python. Familiar with C and C++.

#### Cyber Security

Proficient in Cyber Security for Windows OS, Windows Server OS, and Linux OS.

## Computer Hardware

Expansive knowledge about Desktop/Laptop Computer Hardware including full construction (with or without full watercooling), logical optimization (RAID, Optane), and processor architecture.

## Achievements

- First Place in Bay Area for 2016-2017 Nationwide CyberPatriot Competition.
- First Place in Bay Area for 2017 All IT Day at Las Positas College.
- Elite Cyber Defender Award at 2017 California Cyber Innovation Challenge Invitational.
- Second Place in California Cyber Innovation Challenge Invitational Forensics Event.
- Second Place in Cisco Cyber Cup 2017.
- Nationwide CyberPatriot Platinum Division for 2016-2017 and 2017-2018.
- Top 50 in NYU CSAW HSF competition 2017
- 5/5 on 12 AP Exams including AP Physics C: Mechanics, AP Physics C: Electricity and Magnetism, AP Calculus BC, AP World History, AP US History, and AP Language and Composition.
- 1560/1600 on SAT
- 800 on SAT II Math 2 and Physics. 760 on SAT II World History and US History

# Major Projects

- Swift: Synergy: Created Organizational iOS App for Synergy Group at Renesas Electronics America. Sold to Reneas Electronics.
- HTML, CSS, PHP, and JS: Personal Website: Created full-fledged Website about myself and my interests.
- Hardware: Desktop Builds: Constructed multiple Desktop builds for family and friends. Turned into paid business.
- Synergy C: Automated Sprinkler System: Created programmable automated sprinkler system using renesas DK-S7G2 Board.
- Batch: CyberSecurity Scripts: Created 400+ line Batch cript to secure Windows 7+ and Windows Server Machines.
- JavaScript: Alexa Skills: Created Two Amazon Echo Alexa Skills to provide chess and technology news interactively.
- Java: Super Smash AI: Improved on Machine Learning implementation of Super Smash Bros. Implements Genetic Algorithms and Neural Networks.
- VMWare: CyberPatriot Images: Created tens of CyberPatriot Practice Virtual Machine Images to teach with.
- Java: Binary Genetic Algorithm: Created sample Binary Genetic Algorithm to aid teaching.
- Most Source Code and 26+ more projects available on my **Github**

## ACTIVITIES

- 1. **President:** *CCSC*: Competitive Computer Science Club involved in Cyber Security, Competitive Coding, and the promotion of girls in the IT World.
- 2. **President and Lead Lecturer:** AceCoding: Managed 7 volunteers and taught weekly Java and Git lessons to 40+ students at local middle school. Helped organize ACE Code Day: a local event with 15+ workshops as well as a hackathon that attracts 300 students. Taught Beginner and Advanced Swift as well as Machine Learning at ACE Code Day 2017. Also taught Java, HTML, Scratch, and Python workshops during the Summer.
- 3. **Software Developer:** AVBotz: Part of Software team for autonomous submarine capable of manipulating objects, aiming and shooting torpedoes, and navigating around obstacles. Competed in RoboSub competition.
- 4. **President:** *QuizBowl*: Participated in QuizBowl tournaments including The CalCup. Led practice sessions and prepared club for upcoming Tournaments.
- 5. **Engineer:** Aviation: Designed and built rocket to compete in the Team America Rocketry Challenge.
- 6. **Member:** *Math Team*: Participated in the AMC.
- 7. **Self-Study:** *USACO*: Competed in USA Computing Olympiad.
- 8. Forward: BUSC: Competed in U19 BUSC TriValley Soccer as well as various torunaments such as the California Founder's Cup.

#### ENDNOTE

Make sure to visit my **Website** at https://d2l73v4jsihpz3.cloudfront.net/ for more detailed information.