Pedro Pachuca

Contact Information	**Github** **LinkedIn**	**Website** pedritopachuca@me.com

Who Am I

I am an avid coder, computer enthusiast, teacher, quizbowler, and soccer player. Make sure to visit my **Website** at http://pedropachuca.com and **Github** at https://github.com/PedroPachuca for more detailed information.

Education

Amador Valley High School, Pleasanton, CA

High School Diploma: *Class of 2019*

Expected: Weighted GPA: *4.4*

Relevant Coursework:

AP Physics C: Electricty and Magnetism, AP Physics C: Mechanics, AP Calculus BC, AP Computer Science A, AP Statistics, AP Chemistry

Las Positas College and Online Courswork, Livermore, CA.

Las Positas College GPA: 4.0

Online Coursework GPA: 4.0

Relevant Coursework:

Mechanics: Kinematics and Dynamics by MIT, Cyberwar, Surveillance, and Security by University of Adelaide, Computation Structures 1: Digital Circuits by MIT, Introduction to Real-Time Systems by IEEE, Introduction to Linux by LinuxFoundation, Computer Information Systems, Multivariable Calculus

Skills

App/Web Development

iOS Development: Proficient in Swift and Objective-C. Published or sold 7+ iOS Applications.

Web Development: Proficient in HTML, CSS, and JavaScript. Familiar with PHP and SQL. Published 4 original websites.

Scripting: Familiar with Bash, PowerShell, and UNIX Shell scripting. Created complex, 400+ line cybersecurity script.

General Use Languages: Proficient in Java and Python. Familiar with C and C++. Programmed autonomous submarine in C++.

Computer Hardware and Security

Cyber Security: Proficient in Computer/Web/Application Security. Competed internationally in CyberPatriots–Achieved International Semifinals in Platinum Division. Top 5% internationally for multiple years.

Computer Hardware: Expansive knowledge about Desktop/Laptop Computer Hardware. Hired to custom-build workstations, gaming rigs, and servers. Competed in hardware trivia and construction: regional winner.

IT Teaching *I've taught over 4000 students throughout my highschool career*

During School Year

Lead programming and version control lessons middle school for 20 weeks during the school year for multiple years. Taught concepts ranging from basic fundamentals to in-depth pointers and stack/heap dynamics for about 40 students each session.

Taught Beginner and Advanced Swift, Computer Hardware Cosntruction, and Machine Learning for ACE Code Day to about 300 students each year for multiple years.

Lectured and taught Windows Family Computer Security in preparation for CyberPatriot Competition. All students reached National Quarterfinals–four of my students earned national recognition.

During Summers

Employed as teacher of Introductory and Advanced Computer/Web/Application security. Recruited due to very high CyberPatriots ranking.

Lead free summer lectures on Java, HTML/CSS, Python, and Scratch at local library. Taught about 200 students each summer for multiple years. Earned $500 scholarship for the program.

ACHIEVEMENTS	- Most Distinguished CyberPatriots Individual in Bay Area: 5 1st Place Finishes, 2-time National Semifinalist, 4-time Regional Champion, consistent top 5% internationally. - Second in the State of California for Computer Problem Solving. Qualified to represent California at the National Leadership Conference 2018. Top 80 internationally. - Second Place in California Cyber Innovation Challenge Invitational Forensics Event. Represented Bay Area. - First Place in Bay Area for 2016-2017 and 2017-2018 International CyberPatriot Competition. Reached Platinum division international semifinals both years. Several Regional First Place Finishes in 2017, 2018. 2019 Coca-Cola Scholarship Semifinalist. Currently in contention for Finalist and $20,000 Scholarship. 8th highest score and Gold Medal in Le Grand Concours French National Contest. - Second Place in Cisco Cyber Cup 2017 and T50 in NYU CSAW Computer Forensics Competition 2017 - BUSC U19 League Champions 2015-2017. 5/5 on 8 AP Exams including AP Physics C: Mechanics, AP Physics C: Electricity and Magnetism, and AP Calculus BC as of end of Junior Year. 36/36 on ACT.

| MAJOR PROJECTS | **Swift:** *Synergy*: Created organizational iOS app for Synergy Group at Renesas Electronics America. **JavaScript:** *Alexa Skills*: Created multiple interactive Amazon Alexa Skills for the blind that reads news updates in Technology and Chess aloud. **HTML, CSS, PHP, and JS:** *Personal Website*: Created Website about myself and my interests. **PHP, Swift:** *Pixure*: Created iOS app and website for Pixure LLC. **Hardware:** *Desktop Builds*: Constructed multiple Desktop builds for family and friends. Turned into paid business. **C++:** *Autonamous Submarine*: Programmed various functions for AVBotz autonomous submarine including dice detection and distance calculator. **Batch:** *CyberSecurity Scripts*: Created 450+ line Batch cript to secure Windows 7+ and Windows Server Machines. **Java:** *Super Smash AI*: Improved on Machine Learning implementation of Super Smash Bros. Implements Genetic Algorithms and Neural Networks. Most Source Code and 26+ more projects available on my **Github** |

| ACTIVITIES | 1. **President and highest ranking Competitor:** *CCSC*: Competitive Computer Science Club involved in Cyber Security, Competitive Coding, and the promotion of girls in the IT World. I have gained international recognition for Computer Security and Algorithmic Programming.

2. **Branch Director and Lead Lecturer:** *ACE Coding*: Taught weekly lessons to 40+ students at local middle school. Organized 8-hour event that attracts 300+ participants annually. Taught Swift, ML, Computer Hardware, HTML/CSS, Java, Python, and Scratch throughout the school year and summer.

3. **SysAdmin and Systems Design Director:** *Pixure LLC*: Developed and designed website, mobile apps, and system structure.

4. **Employed Teacher**: *Las Positas College:* I teach introductory and advanced Computer Security and Digital Forensics classes at a local community college.

5. **Software Engineer:** *AVBotz*: Part of Software team for autonomous submarine capable of manipulating objects, aiming and shooting torpedoes, and navigating around obstacles. International finalist at AUVSI RoboSub Competition–we have beaten competitors such as Cornell and USC.

6. **Competitor:** *QuizBowl*: Participated in QuizBowl tournaments including The CalCup. Led practice sessions and prepared club for upcoming Tournaments. Participated in Stanford NorCal Championships.

7. **Secretary and Engineer:** *Aviation*: Designed and built rocket to compete in the Team America Rocketry Challenge. I also guide new teams in design and engineering.

8. **President of Competitions and highest ranking Competitor:** *AVFBLA*: Organized and taught students for Future Business Leaders of America competitions. I am internationally ranked in Computer Problem Solving.

9. **Forward:** *BUSC*: I play forward on the U19 Pleasanton Men's soccer team. Recognized as the 2017 Northern California Mens U19 Soccer Champions.

10. **Interest:** *Woodworking*: Over 780 hours of active woodworking experience. Created furniture, pens, and boxes/bowls. |