Emmanuel Gallegos

Computer Science Student

Education

2008-2012 High School Diploma, Bishop O'Dowd High School, Oakland - CA.

2012-2015 **Physics/Math Major**, Reed College, Portland - OR.

2017-2019 AS Mathematics, AST Computer Science, Chabot College, Hayward - CA.

2019-Current **BS Computer Science (in progress)**, *CSU East Bay*, Hayward - CA, Expected Graduation: December, 2020.

Experience

2019-Current Coding Instructor, KidzToPros, SF Bay Area.

I teach coding in various elementary schools across the San Francisco Bay Area in after-school programs. In particular, I teach Introduction to Coding and Introduction to Game Design, using the Scratch programming language. As a private contractor, I have the privilege of being able to doctor the curricula as I see fit, and I frequently design my own games and exercises to keep my students engaged in the material.

2018-Current Peer Tutor, Free-Lance (Paid), Chabot College, CSU East Bay.

After a few classmates approached me to ask if I tutored, I decided to begin my practice at Chabot College. Starting with Assembly Language Programming, I expanded the practice to my other courses and maintained it through my transfer to CSU East Bay. This past semester, I tutored for Automata and Computation; this semester, I will be tutoring for Programming Language Concepts, Artificial Intelligence, and Software Engineering. I must stress that I don't do work *for* my classmates and instead offer true support through one-on-one teaching using my honed communication skills and rigorous understanding of the material.

2016-2017 Brain Coach, Marbles, the Brain Store, Fisherman's Wharf, San Francisco.

I worked as a 'Brain Coach,' a moniker somewhat akin to the Apple Store's 'Genius,' at Fisherman's Wharf. In essence, I was a sales representative, though in practice my job largely consisted of teaching international tourist families how to play unique learning-based board games. Although it was quite literally 'all fun and games,' it *did* also help solidify my communication and teaching skills, as well as expand my emotional intelligence overall.

Programming

C++ My strongest programming language: I learned how to code up to data structures in C++, and am familiar with the C standard library. Classes I've taken and received A's in regarding this language are: Introduction to Structured Program in C++, Object-Oriented Programming Methods, and Data Structures and Algorithms

Java My first programming language: I am familiar up to data structures in Java, including object oriented programming, and have studied senior level software engineering using Java. I received an A in Object-Oriented Programming Methods in Java, and am currently taking Software Engineering which focuses on Java programming.

Python Participating in an IEEE Micromouse robotics competition this April, I am developing software with a team of four which will be deployed onto an autonomous robotic mouse in order to traverse, map, find an optimal route, then navigate through a large modular maze as quickly as possible. For the purpose of this competition, I have begun learning Python, as many software tools available for simulating autonomous robotics use Python, and we will likely deploy our final software in the language.

UNIX I began learning UNIX in an Introduction to UNIX course, which I received an A in, and have also set up a personal dedicated Linux server for hosting video game sessions between friends. My experience includes use of the VIM text editor, regular expressions, and scripting.

Git/GitHub I am familiar with imposing version control on large projects using the GIT shell and through integrated plugins for IDE's such as IntelliJ IDEA and Eclipse. I am familiar with managing these projects through external hosting services such as GitHub. My familiarity with Git and GitHub comes from the following classes which I am currently enrolled in: Software Engineering, Website Development.

HTML/CSS/JSI am building experience with these languages in a Website Development course I am currently enrolled in. Thus far, we have built simple four/five page sites using grid and flex displays, modal dialogs, and event handling, and have deployed these sites to our school web servers. I am picking up the content quickly and am confident I will have sufficient experience with these languages, as well as XML, React, and Node.js, which we will start working with soon, for entry-level work by the end of Spring 2020.

Other Knowledge Areas

Academic LaTex, Mathematica, Microsoft Office Suite

Languages English—Academic, Spanish—Casual

Personal Digital Music, Creative Writing

Achievement in IEEE

Xtreme I've had the opportunity to participate and place in IEEE's Xtreme **24-hour hackathon**. Our team, comprised of three undergraduate students, placed fifth in the West Coast region, which included schools across California, Oregon, Washington, and Montana, and placed thirteenth in the country. We competed internationally with students at both the undergraduate and graduate levels.

Micromouse This semester in IEEE, I am participating in and helping coordinate a Micromouse engineering competition across various California universities which will be hosted at our campus (CSU East Bay) later this spring. The competition involves building and programming an autonomous robot to navigate an optimal route through a modular maze in the fastest time possible.