MICHAEL YEH

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Skills

PROGRAMMING AND SCRIPTING LANGUAGES

Java
C
C++
C#
Python
Selenium
Unix Shell
R
ARM Assembly
Batch

WEB-DEVELOPMENT

HTML 5
CSS
JavaScript
Bootstrap

MISCELLANEOUS

Mathematics
Spanish Language
3D Modeling
3D Printing
Git/GitHub
Visual Studio Code
Android Studio/App Development
Fusion360

DEBUGGING TOOLS

GDB
JDB
Valgrind
JUnit
Python DocTests

Education

University of California - San Diego 2018 to 2022
Bachelor's in Mathematics - Computer Science
Area of Study in Cognitive Science
GPA: 3.5

Employment

Self-Employed
Java & Python Tutor For College Students 2014 to Current

- Create graphics and visuals to assist students in understanding topics covered in students' college courses through various graphics software such as Paint.net, Photoshop, and other course-related softwares.
- Help students complete programming assignments by advising students on appropriate techniques and algorithms to use based on the context and assignment both in person and online.

Self-Employed
Math Tutor 2017 to Current

- Create personalized problems by taking into account student's interests to assist in learning on various topics covered in student's homework and the Common Core curriculum.
- Explain concepts in different ways inorder to improve comprehension.

Projects

Biodegradable Ammunition Nov. 2016 to Feb. 2017

- The US Department of Defense began searching for biodegradable training ammunition after finding spent ammunition from military training creates regions that are hard to cultivate and damages the environment
- Through experimentation, I was able to create functional prototype ammunition that replaces traditional lead projectiles and brass casing with common biodegradable materials
- Prototype projectiles were tested and confirmed to be stable in super-sonic flight by high-speed camera.
- Manufactured functional 12 gauge shotgun cartridges that were nearly 100% biodegradable

3D Printing Business 2020 to Current

- 3D model unique parts for customers using CAD programs such as TinkerCAD, Sketchup, or Fusion360
- 3D print models for customers
- Maintain 3D printers through replacing parts, maintaining bed level, and calibrate material profiles to create optimal parts

NFC Rings 2015

- Began business to provide a cheaper alternative to current market options of NFC rings.
- Self-taught 3D modeling using TinkerCAD and SketchUp. Designed and tested rings through 3D-printing.
- Designed a crowdfunding page with HTML and Paint.net and surpassed the goal on IndieGoGo.com.

Volunteering

USA Archery · Certified Archery Instructor/Coach Mar. 2020 to Mar. 2023

I am a part of UCSD competitive archery team. Because I enjoy the sport so much, I decided that I wanted to get certified as a coach to further my knowledge of the sport and so that I can teach others the sport safely and correctly! With this skill, I have been able to guide new archers to be able to shoot better and enjoy the sport more!

Related Coursework

CSE 11 & 12: Data Structures and Object-Oriented Design

- Courses based on Java, C, and C++
- Studied multi-threading in Java and JavaFX
- Created data structures such as stacks, queues, heaps, and binary trees

CSE 30: Computer Organization and Systems

- Worked in C and ARM Assembly to develop an understanding of computer architecture and low-level computer programming

COGS 3: Front-End Development Tools

- Created a portfolio with HTML, CSS, Bootstrap 4, JavaScript, and Photoshop

MATH 20C-E, 103, 109, 170a, 183: Honors and Upper-Division Mathematics Current

- Honors differential, vector, and multi-variable calculus
- Upper-division courses for field/group theory, mathematical reasoning, analysis, linear algebra, and statistics

CSE 100, 101, & 105: Advance Data Structures, Algorithm Design & Analysis, Theory of Computation