Christopher Pence

6cpence@gmail.com • +15108568619 • pencels.net

Employment

UCSD Computer Science & Engineering Department · La Jolla, CA

Head CS Tutor · *Sep '16 – Jun '17 | Sep '17 – Jun '18 | Sep '18 – current*

- Taught C, ARM/SPARC assembly, and Java to classes of up to 600 students.
- Conducted quiz reviews with groups of up to 200 students.
- Improved discussion session workflow, resulting in increased presentation quality.
- Solidified understanding of cross-language concepts by designing class discussions.
- Enhanced communication skills by one-on-one tutoring.
- Developed leadership skills by mentoring and guiding discussion plan development with the tutor team.

WhizKidz Computer Center · San José, CA

Instructor/Developer · *Jun '16 – Sep '16 | Jun '17 – Aug '17 | Jun '18 – Jul '18*

- Constructed curricula for two pilot game development classes using Pygame Python gaming library.
- Implemented a permissions-based user account system in MySQL and PHP for the website.
- Designed an online homework system with data-driven interface construction, using React.
- Taught Python, Java, Front-/Back-end Web Development, and hardware/IoT classes.

Education

B.S. in Computer Science · University of California - San Diego

Relevant Coursework · *Sep '15 – Jun '19 | GPA: 3.87*

- Software Engineering Project (Android Phone App)
- SQL, Database Implementation (C++), Computer Networks
- Computer Architecture, Systems Programming, Operating Systems
- Machine Learning, Linear Algebra
- Data Structures and Object-Oriented Design (C++)
- Discrete Mathematics, Algorithms Analysis, Computability Theory

Projects

ProofBuilder: Won first place in the Education category at Hacktech '16 for a proof "workbench" written with HTML/CSS/JS that facilitates writing proofs for proof-based classes.

Eventlit: Android mobile application with a Firebase backend for authentication and data storage. Made for CSE 110 software engineering course at UCSD. Provides a platform for UCSD student organizations to post events and accept RSVPs.

jas: Reinforced newly acquired knowledge of ISAs by writing an assembler in C, for a hypothetical virtual machine and its instruction-set (personal project).

slang: Reinforced programming language skills by developing a programming language inspired by Haskell with functional and imperative programming features (personal project).

Skills

Highly Experienced with: C, Java, Python, Unix

Web Stack: HTML5, CSS3, JavaScript (with jQuery), React

Capable with: C++, MySQL, PHP, Matlab, Wolfram, Java AWT, LaTeX

Source Control and Editors: Git, Vim, Atom.io, IntelliJ, Eclipse, Visual Studio

Natural languages: English, Spanish