

# Christopher Pence

cpence@ucsd.edu • +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 Organization and Systems Programming
  - 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

---