

NIKKI WOO

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EXPERIENCE

AT&T Entertainment Group | Python

June - September 2019

Software Engineering Intern

- Streamlined power manipulation and functionality verification of residential gateway via Python script using GPIB, TCP/IP, and serial communication.
- Designed interactive GUI to allow for variable parameters and equipment as well as clarity of progress during process.
- Reduced man hours required for brownout testing from 24 hours to under one hour.

Algorithmic Research in Information Flow Lab | MATLAB

June – August 2018

Undergraduate Researcher

- Analyzed secure capacity of wireless data transmission using 1-2-1 networks.
- Implemented various schemes of choosing paths for optimal information transfer within 1-2-1 networks via MATLAB, factoring in presence of wiretapper and path relationships.
- Compiled research into visual aid that won “Best Poster” at the Summer Undergraduate Scholars Program 2018 Poster Symposium.

PROJECTS

UCLA IDEA Hacks Website Team | HTML/CSS, Javascript

July 2019

- Adapted design and backend logic of IDEA Hacks website registration and login page.

Fly the Friendly Sky | Unity, C#

January 2019 – June 2019

- Assembled and designed a 2D pixel art long flight simulation survival game using the Unity software and C# scripts.
- Apply intended interactions between game objects to create working game inventory, scenes, and keyboard input-triggered animations.

Binary Blaster | Verilog

May 2019

- Coordinated within a team of three to create a “Binary Blaster” game utilizing a Nexys3 FPGA board and monitor.
- Programmed the FPGA board to match switch patterns to random binary numbers shown on screen, maintain a running point total, and keep a running timer to periodically regenerate the number being displayed.

EDUCATION & HONORS

University of California, Los Angeles | Computer Science and Engineering, B.S.

Expected Graduation: June 2021

GPA: 3.93 / 4.00

Upsilon Pi Epsilon

Tau Beta Pi

Regents Scholar

Rewriting the Code Fellow

Eta Kappa Nu

ECE Fast Track

SKILLS

Languages:

Python, C/C++, OCaml, Prolog

Software:

Unity, Solidworks, Adobe Illustrator

Hard Skills:

Soldering, Woodworking

LEADERSHIP

University of California, Los Angeles

Resident Assistant

May 2018 – Present

- Facilitate positive social interactions between residents while promoting an environment of safety and belonging.
- Resolve conflicts and enforce University Housing policies amongst students.

Upsilon Pi Epsilon at University of California, Los Angeles

Tutoring Chair

May 2019 – Present

- Host test review and project hack sessions for various introductory and upper division computer science classes.
- Guide individual students through homework and projects.

COURSEWORK

Database Systems

Formal Languages/Automata Theory

Algorithms and Complexity

Machine Learning

Programming Languages

Data Structures and Algorithms

Cryptography

Operating System Principles

Computer Organization