Nikki Woo

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EDUCATION

University of California, Los Angeles
Computer Science and Engineering, B.S.
Expected Graduation: June 2021
GPA: 3.93 / 4.00

HONORS

Upsilon Pi Epsilon
Tau Beta Pi
Eta Kappa Nu
Regents Scholar
ECE Fast Track

COURSEWORK

Current:
Computer Network Fundamentals
Formal Languages/Automata Theory
Past:
Operating System Principles
Algorithms and Complexity
Software Construction Lab
Discrete Structures
Digital Design
Data Structures and Algorithms
Computer Organization (assembly)
Logic & Design of Digital Systems

SKILLS

Languages:
Proficient: C, Python, C++, MATLAB
Familiar: HTML/CSS, C#
Software:
Linux, Emacs, LaTeX, Unity, Solidworks, Adobe Illustrator, Adobe Photoshop, Excel
Hard Skills:
Soldering, Woodworking

OTHER INTERESTS

Dance
Baking
Graphic Design

EXPERIENCE

AT&T Entertainment Group | *Python*
Software Engineering Intern   June 2019 – Present
- Streamline power manipulation and functionality verification of residential gateway via Python script using GPIB, TCP IP, and serial communication.
- Design GUI to allow for variable parameters and equipment as well as clarity of progress during process.

Algorithmic Research in Information Flow Lab | *MATLAB*
Undergraduate Researcher   June – August 2018
- 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

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.

Asepsis | *HTML/CSS, Adobe Illustrator*   November 2018
- Designed and coded website that displayed real-time air quality indices at various UC campuses.

Maze-Solving Arduino Car | *Arduino, Soldering*   March – June 2018
- Built a car capable of maneuvering walls and solving a maze on its own with a team of two others.
- Designed a PCB in EAGLE, programmed Arduino, and soldered components to produce a car system that could sense walls using IR transmitters and receivers and orient itself accordingly to read the end of a maze.

Chetyris | *C++*   May 2018
- Coded a variation of the classic game *Tetris* that utilized various data structures, recursion, and inheritance.

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.
- Enforce University Housing rules while supervising the mental and physical health of other 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 CS classes for UCLA undergraduates.
- Guide individual CS students through projects and test problems.