Nikki Woo

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EDUCATION

University of California, Los Angeles
Computer Science and Engineering, B.S.
Expected Graduation: June 2021
GPA: 3.92 / 4.00

HONORS

Regents Scholar
Tau Beta Pi
Eta Kappa Nu
ECE Fast Track

COURSEWORK

Current:
Software Construction Lab
Discrete Structures
Digital Design
Past:
Data Structures and Algorithms
Computer Organization (assembly)
Logic & Design of Digital Systems
Differential Equations
Linear Algebra

SKILLS

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

OTHER INTERESTS

Dance (contemporary, hip hop, ballet)
Singing
Graphic Design
Calligraphy
Video Editing

EXPERIENCE

Algorithmic Research in Information Flow Lab
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

UCLA Game Lab: The Plane Ride | *Unity, C#* January 2019 - Present
- Assemble and code 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.

IDEA Hacks Jet Lag Clock | *Arduino* January 2019
- Implemented an Arduino clock that emitted light pulses and sound aimed towards suppressing anxiety and jet lag that comes with travel.
- Coded, wired, and soldered a seven-segment clock.

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 promote an environment of safety and belonging.
- Enforce University Housing rules while supervising the mental and physical health of other students.

UCLA Regents Scholar Society
Activities Director May 2018 – Present
- Plan and execute various social events for the purpose of building community within the Society.
- Head a committee and spearhead discussion and execution of future programs.