

## EDUCATION

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- **University of Illinois** Champaign, IL  
*Bachelor of Science Major in Computer Engineering; Minor in East Language and Culture* August 2024

## EXPERIENCE

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- **Beckman Institute for Advanced Science and Technology** Urbana, IL  
*IT Support* Jun 2022 - May 2024
  - **Diagnostics:** Respond to user tickets and resolve hardware, software, and server-related issues for biomedical apparatus and researchers.
- **Illinois Space Tech Academy (*JavaScript, HTML/CSS*)** Champaign, IL  
*Web Developer* Jun 2022 - Aug 2022
  - **Website Development:** Led the creation of a responsive educational website centered around NASA's Artemis project, tailored for enthusiasts seeking to explore space technology.
  - **Interactive Quizzes:** Crafted interactive quizzes that enhanced user engagement and provided real-time feedback to participants.
- **Code Ninjas (*JavaScript, HTML/CSS, Lua, Python*)** Libertyville, IL  
*Coding Instructor* Sep 2018 - Jul 2019
  - **Leadership and Instruction:** Provided mentorship to students including foundational coding and robotics principles in an engaging and accessible manner.

## PROJECTS

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- **JargonJolt (*C++, JavaScript, HTML/CSS, SQL*):** Developed an ESP32-based portable flashcard language learning device utilizing a spaced repetition algorithm with integration between the Anki flashcard app.
- **Nixie Tube Clock (*C, MPLAB X IDE*):** Engineered a clock using PIC microprocessors and Microchip's Real-Time Clock to display the current time in a HH:MM:SS format.
- **FPGA Rhythm Game (*SystemVerilog*):** Created a rhythm game utilizing I2S audio SDRAM configurations.
- **Mosaic Generator from PNGs (*C++*):** Implemented code which uses k-d trees and nearest neighbor algorithms.
- **Youtube to Ascii Converter (*Python*):** Utilized OpenCV2 to convert videos into JavaScript ASCII animations.
- **Sound Controlled LEDs (*C++, Arduino*):** Used MSGEQ7 graphic equalizers to pulse lights in time with music played through an audio-in channel. Colors change according to the frequencies of the audio data.

## SKILLS

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- **Programming & Development:** C, C++, Python, SQL, Lua, Java, JavaScript, HTML/CSS, React, Node.js, Git
- **Software Tools & Applications:** Quartus, Cadence, KiCad, MPLAB X IDE
- **Multilingual Communication:** Spanish, Japanese

## RELEVANT COURSEWORK

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- **Relevant Courses:** Computer Security, Applied Parallel Programming, Artificial Intelligence, Analog IC Design, Digital Systems Laboratory, Digital Signal Processing, Senior Design Project Laboratory

## AFFILIATIONS

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- **DDRillini** Urbana, IL  
*Club President* Aug 2023 - Present
  - **Rumble in the Prairie:** Led two tournaments of the longest running tournament series in the Dance Dance Revolution community allowing players from the UK, Singapore, South Korea, Japan, and more to connect with each other and compete at the highest level.
  - **ddrillini.club:** Updated and maintained the club website with new club information including an automatic high score tracker for each player.
- **Illini Solar Car** Urbana, IL  
*Electrical Team* Aug 2020 - Aug 2021
  - **Battery Subsystem (*KiCad*):** Collaborated to improve the new battery subsystem for Illini Solar Car's 'Brizo'.