Daniel Chamoun

http://danielchamoun.tech/

Email : dchamoun23@gmail.com
Mobile : +1-224-355-7872

Education

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

Experience

- **Antunes (*C++*)** — Carol Stream, IL
  Electrical Hardware Engineer — *Mar 2025 - Present*
  - **Hardware Design**: Develop, prototype, and optimize analog, digital, and microprocessor-based circuit boards using Altium Designer, MPLAB, and STM32Cube for embedded system products used in the food industry.
  - **Troubleshooting & Manufacturing Support**: Diagnose and resolve manufacturing product assembly and test procedure issues, ensuring seamless post-production support and product improvements.
  - **Testing & Compliance**: Conduct verification and validation testing, create test plans, and collaborate with engineering teams for new product development and compliance coordination.
- **Beckman Institute for Advanced Science and Technology** — Urbana, IL
  IT Support — *Jun 2022 - May 2024*
  - **Diagnostics**: Responded to user tickets and resolved 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

- **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

- **Programming & Development**: C, C++, Python, SQL, Lua, Java, JavaScript, HTML/CSS, React, Node.js, Git
- **Software Tools & Applications**: Altium, MPLAB, STM32Cube, Solidworks, Quartus, Cadence, KiCad
- **Multilingual Communication**: Spanish, Japanese

Relevant Coursework

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