

# John Trachte

Electrical Engineering & Computer Science Student



Personal site

## Education

UW Platteville: GPA 3.43 / 4.0

May 2027

Electrical Engineering BS, Computer Science BS, Spanish Minor

## Work Experience

CenterPOINT: Innovation LLC Team Lead

January 2024 - Present

- Balanced event cost with student interest to maximize engagement with LLC programming, achieving record attendance
- Ensured appropriate tracking and documentation of University and taxpayer funds for events to simplify year-end accounting
- Managed information flow with Microsoft Office suite, especially Outlook and Teams to ensure relevant information was readily available for external and internal use

PepsiCo: Summer Assistant

June 2022/23/24 - August 2022/23/24

- Assisted untrained coworkers in learning job functions and automated equipment to update older facilities
- Coordinated delivery schedule with truck load to shave off hours-long inefficiencies

## Skills

Languages: C/C++, Python, Java, ARM Assembly, BASH, SQL

Software: Linux, Git, Docker, GDB, Make/CMake, STM32CubeIDE, Microsoft Office, KiCAD, B2Spice

Tools: Multimeter, Oscilloscope, Function Generator

## Projects

Synth VCO

(KiCAD, Oscilloscope)

Design a cheap, flexible voltage controlled oscillator covering the audio frequency range.

- Designed a suitable circuit with controlled frequency using only three unique parts, drastically lowering bill of materials cost compared to existing oscillators
- Tested design using existing components and tools to document appropriate operating voltage ranges
- Derived nonlinear frequency response from linear input voltages to track oscillation to musical scale

Attendance App

(Python)

Log and manage class attendance using student ID cards and PN532 NFC reader.

- Worked with an Agile team over three sprints using test-driven development to maintain functionality across sprints
- Interacted with RESTful API via JSON strings to log attendance data
- Designed object-oriented system with SOLID principles to simplify development