# PETER YEHL

### **OBJECTIVE**

Seeking an entry level position that leverages embedded software development practices and offers opportunities for professional growth. (309) 307-2093

peter-yehl.github.io

yehl.peter@gmail.com

in linkedin.com/in/peter-yehl

### **EDUCATION**

**Iowa State University** Spring 2026

**Bachelor of Science** Computer Engineering

**GPA** 3.6 / 4.0 **Major GPA** 3.7 / 4.0

### SKILLS

## **Embedded Systems**

- C/C++ Embedded Programming
- Linux Dev, GNU Toolchain
- GDB Debugging
- Arduino Development
- VHDL, LTspice, Circuit Analysis

### **Software Tools**

- Bash
- GitLab / GitHub CI/CD
- MATLAB, Simulink, LTSpice

### **Hardware Interfaces**

- UART, GPIO, CAN
- Oscilloscopes, DMMs, SMUs
- PuTTY Serial Communication

### Scripting & Software Development

- Python, Java
- Jira Project Tracking
- Database Management (MySQL)
- Data Structures and Algorithms

### **ACTIVITIES & AWARDS**

- Engineers for a Sustainable World
- Mountaineering and Climbing Club
- Blessed Birthdays Leader
- Dean's List

### **WORK EXPERIENCE**

# Embedded Software Engineer Intern

Pella, IA 2025

### Vermeer Corporation

- Developed a C++/Python file conversion tool (JSYM to DBC, ASC to MF4) with pybind11, achieving <50 milisecond conversion time
- Designed a modular frontend-backend architecture to streamline internal tooling
- Modified a R427 controller, altering firmware to add a custom menu option
- Collaborated through GitHub for peer-reviewed code integration and used Jira to track tasks and feature progress
- Participated in daily Agile stand-ups, providing updates and collaboration with teammates



# 🕰 Engineering Intern

Ames, IA 2024

### City of Ames

- Prepared CAD and GIS documentation for infrastructure projects in order to optimize the planning and execution phases
- Developed and maintained project records, "as-built" drawings, and progress payments
- Performed surveying and GPS marking using GNSS equipment

### TECHNICAL PROJECTS

### MIPS Single Core Processor | VHDL

- Designed and implemented a single-core, 5-stage pipelined processor capable of executing MIPS assembly instructions
- Developed key components that included registers, multiplexers, ALU, forwarding logic, and hazard detection units, to construct a fully functional datapath with proper logic control

### Riff Radar | Java

- Developed a mobile application connecting music fans with bands, utilizing Android Studio, IntelliJ, and Spring Boot
- Integrated Ticketmaster, Google Maps, and Spotify APIs
- Utilized Maven for build automation and MySQL for database management
- Managed code with Git and GitLab; documented with Swagger

### iRobot | C

- Simulated a hospital delivery robot using manual navigation through a websocket-rooted GUI
- Utilized an ARM Cortex M4 microcontroller to conduct bit field manipulation through datasheet analysis
- Deployed UART, ADC, interrupt, memory mapping, and PWM techniques