

Seth Ian Klaassen

Phone: 319 - 654 - 2851 Email: sik2004@iastate.edu
Home: 3205 Pebble Drive SW, Cedar Rapids, IA 52404

Education:

Iowa State University | Ames, Iowa | Anticipated
Graduation: Fall 2026

Bachelor of Science in Electrical Engineering
G.P.A. 3.36/4.0

Internships:

John Deere - Product Verification and Validation - *Summer 2025*

- Projects:
 - CAN (Controler Area Network) Message Reformater Gateway (emb32)
 - Adding functionality to a Digital CAN Testbench
- Working with Realtime Computers
- Team Lead Project Organization
- Class 1 Motor Grader Certified

MMS: Midwest Microwave Solutions Intern - *Summer 2024*

- RF Board Testing: jitter temp tests, tune speed, filter bandwidth test, BIT error testing
- Coding projects:
 - Embedded System: PIC32, Direct Memory Access (DMA), improved command speed
 - Firmware Test Rig: GPIB controlled automated tests in Python using the robot framework, list comprehension, context manager
- Hand manufactured filters and designed custom preselector bands on an RF Tuner board
- Managed data collection to provide customers with accurate part documentation
- Analyzed data output to determine necessary corrections to fix part failures

Relevant Coursework:

- CPRE288: Embedded Systems
- EE330: Integrated Circuits
- EE324: Signals and Systems 2
- CPRE381: CPU Architecture and Assembly Level Systems

Technical Skills:

- Programming Languages: Python, C, Java, Verilog, Arduino
- Software Tools: GIT, MATLAB, AutoDesk Inventor, Quartus Prime, LTspice,
- Laboratory Equipment: Spectrum/Network Analyzer, Oscilloscopes, Multimeters, LCR Meters, Soldering Irons, 3D Printers, and Laboratory Power Supplies

University Project | Laser Harp

- Designed a tileable circuit able to detect the breaking of a laser to play a corresponding note
- Programmed an Arduino to detect inputs and send out sounds to a speaker.
- Modeled the final designs of the instrument's casing in AutoDesk Inventor
- Converted the AutoDesk file into 3D printable file
- Gained knowledge in how to make drawing files

Awards & Honors:

- Dean's List - Iowa State University - Spring Semester 2023 - Fall Semester 2023