

Tyler Tiede

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EDUCATION

SUNY Geneseo

August 2016 – May 2021

BS, Major in Applied Physics, Minor in Mathematics

Geneseo, NY

Relevant Coursework:

- Intermediate Laboratory: Students complete various labs and in-depth lab reports. Includes students designing their own experiment, performing the experiment, and creating a lab report and presenting it. Hardware used such as oscilloscope, multimeter, multi-channel analyzer, fast filter amp; some software also used including ImageJ
Grade: B
- Instrumentation & Interfacing: Students learn how to write code in LabVIEW and become familiar with hardware to build projects, such as serial interfaces, servo motors/controllers, camera acquisition. Final project includes designing and building a [project](#) (← video link) meeting specific hardware requirements and using LabVIEW to take data.
Grade: A-
- Digital Electronics: Students become familiar with Arduino hardware and Arduino C code. My final project was an auto tea brewer that included a water pump, timer, temperature control, LCD screen with menu navigation buttons, and tea selection/customization.
Grade: A-
- Electric Circuit Analysis: Students learn how to analyze properties and behavior of linear electronic circuits.
Grade: B-
- Seminar in Physics: Students learn presentation skills by creating presentations on Physics experiments. Final project was a presentation on a topic of your choosing.
Grade: A-
- Programming: Students learn basic Python.
Grade: A

RELEVANT WORK EXPERIENCE

MKS Instruments

January 2022 – Present

Software Engineer

Rochester, NY

- Designed and wrote all software for a test board which controls I²C devices to interface with RF generator control board. Includes Arduino code, Python libraries, regression interfaces, regression tests, graphical interface, and serial communication.
- Designed and managed regression tests used to test various features on RF plasma control systems.
- Fix and track down any bugs that appear or have existed in regression framework.
- Created various scripts regarding data collection/parsing.
- Used software serial communication with oscilloscopes, switch matrixes, function generators, AC power switches, and Arduinos

Corning Incorporated

August 2021 – December 2021

Optics Technician

Fairport, NY

- Alignment, adjustment, and testing of opto-mechanical components and assemblies.
- Handle, inspect, and clean delicate optical components and assemblies.
- Read work orders, engineering drawings, and work instructions for product optimization.
- Perform detailed recordkeeping during assembly & testing procedure.
- Maintain proper safety protocols for clean room operations.
- Perform coarse and fine adjustments requiring use of hand tools, precision measuring devices, and other

specialized equipment including, but not limited to torque wrenches, optical microscopes, height gauges, Vernier gages, micrometers, and electronic testing fixtures.

- Coordinate with team members to ensure efficient flow through various stages of assembly and testing procedures.

SUNY Geneseo

June 2018 – March 2020

Assistant System Administrator

Geneseo, NY

- Implementing scheduling restrictions on building access for electronic locks across Geneseo campus.
- Manage all card access for students across campus.
- Troubleshooting card access/lock issues on-site and remotely.
- Assist in programming web applications using MySQL databases to be used across SUNY Geneseo such as their Alert system and Administrative Systems Information System (ticket/request management).

Varsity Tutors

February 2020 – May 2020

Tutor

Online

- Tutoring students in Mathematics and Physics.

SUNY Geneseo

February 2021 – May 2021

Undergraduate Lab Instructor

Geneseo, NY

- Teach in-person general physics labs to undergraduates.
- Hold weekly office hours.
- Grade all students' work done in lab.

SKILLS & INTERESTS

- **Skills:** Python, C++, Excel/Office, LabVIEW, Arduino C, PHP/Laravel, MySQL, Mathematica, Perforce, Git
- **Interests:** Disc Golf, Boulderling, Snowboarding, Weightlifting, Guitar, Piano, Saxophone