Jack Ganger-Spivak

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EDUCATION

Rochester Institute of Technology (RIT), Rochester, NY
Bachelor of Science in Software Engineering, Minor in Computer Engineering

WORK EXPERIENCE

Software Consultant, RIT Kate Gleason College of Engineering September 2024 - May 2025
Developing software components for several engineering senior projects including:

- Built web front-end for electric car chargers in **JavaScript**
- Developed Android app to interface via bluetooth with a field sports assistive device
- Created full software, hardware, and electrical control system for pneumatic press
- Implemented **Python** frontend and MIDI conversion tool for automatic chime player installation

Full-Stack Developer, RIT Simone Center and Foundry Digital June 2023 - August 2023

- Worked in a team to develop a repair invoice generation tool integrating with Jira
- Conducted weekly meetings with client, including customer discovery, clarifying requirements, demos

Technician, EEnable Inc June 2021 - August 2021

- Provided phone and remote support for customers, as well as in-person support and repair

PROJECTS

BeyondRGB Spectral Imaging, Senior Project September 2025 - May 2025

- Ported to **Ubuntu** and **Fedora Linux**, set up **CI** pipeline targeting Windows, Linux, and macOS on x86-64 and ARM64. Reduced Windows CI build time from over 1 hour to 12 minutes
- Updated and consolidated build documentation to ensure easy onboarding for future teams

Homelab, Personal Project July 2025 - Present

- Built **Debian** server to securely backup family photos and personal files
- Used **ZFS** mirror array of NAS-quality hard drives to protect against bit rot and drive failure
- Installed **Kopia** Backup Server software and **Tailscale** to allow for secure VPN connections
- Set up used rack server with **Proxmox** to quickly test applications in different operating systems
- Automated system updates with alerts and set up **uptime monitoring** for personal website

Custom 3D-printed Foam Dart Blaster Prototype, Personal Project January 2025 - April 2025

- Uses flywheels powered by brushless drone motors to accelerate darts
- Motors driven by electronic speed controller controlled by **ESP32** microcontroller
- **CAD**, electrical design and software design done by me, used **Fusion 360**

4917 Emulator, Personal Project October 2022 - August 2023

- Created emulator for simple 4-bit computer to gain experience working with Rust
- Designed assembler function to generate machine code from human-readable code

LEADERSHIP AND VOLUNTEERING

Society of Software Engineers, Lab Division January 2025 - May 2025

- Set up update monitoring for servers running SSE website
- Rebuilt and set up streaming computer for SSE talks
- Migrated Debian-based server to virtualized Proxmox-based server

RIT Foam Blaster Club, President August 2024 - May 2025

- Organized and ran orientation events with 150+ attendees and introduced high-skill competitive clinic events, organized charity fundraiser event for RIT scholarship that raised $2410