

Benjamin Petterborg

EDUCATION

B.S., Software Engineering, Bowling Green State University - GPA 3.5 May 2023 - May 2026
Coursework: Software Architecture & Design, Software Testing, Intro to Software Security, Usability Engineering, Android Development, Intro to Software Engineering

EXPERIENCE

R&D Undergraduate Intern, Sandia National Laboratories May 2024 - present

- Developing, refactoring, and testing a legacy radiological accident consequence modeling code suite.
- Rewrote the site description file processor to support excel-compatible files.
- Modified bilinear interpolation algorithm to be logarithmic.
- Coordinated with internal licensing and both international and domestic partners in industry and government regulatory bodies to distribute suite.
- Technical writing for revisions to user guide.
- Improved, simplified, and created training material for a complex software licensing process.

Seasonal Production Line Worker, LarMar Foods May 2023 - May 2024

- Produced a premium salad dressing while resolving production and assembly line issues in real time.

SKILLS

- **Programming**
 - Fortran, C++, Python, R, Ruby, HTML with Bootstrap CSS, some Kotlin & Visual Basic
 - Visual Studio, Android Studio, Git, GitLab, limited Cmake
- **DevOps**
 - Debian/Ubuntu, Fedora/CentOS, & NixOS
 - Docker, Proxmox (hypervisor), OPNsense/PFSense
 - Raspberry Pi, Arduino
 - Configuring network equipment
- **Office tools**
 - Microsoft Excel, Word, & Outlook
 - L^AT_EX
- **Japanese**, conversational, about N3.

CERTIFICATES

FEMA ICS 300, Intermediate Incident Command System for Expanding Incidents
FEMA ICS 400, Advanced Incident Command System for Command and General Staff

ACTIVITIES & INTERESTS

Boy Scouts of America, Eagle Scout	September 2016 - June 2019
Civil Air Patrol	July 2019 - May 2024
BGSU Japanese Club	August 2022 - present

PERSONAL PROJECTS

Enterprise Networking & Web Broadcasting

- Designed a reliable, industry-standard solution to replace a legacy analog video broadcasting system for a local church.
- Reduced future costs and improved maintainability.

Technologies: Ubuntu, OBS Studio, rtsp-simple-server, PTZ cameras