

Mathias Petersen

IT / SECURITY / INFRASTRUCTURE
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github.com/SoZ0 | github.com/Prometheus-Dynamics

Security+ Certified Technical Founder | Linux, Kubernetes, Embedded Devices, On-Site IT

FOCUS Security-certified engineering student with hands-on infrastructure, Linux, Kubernetes, embedded-device deployment, site installation, and risk-assessment experience. Strongest in roles needing practical technical ownership rather than only ticket handling.			
Security+ certified active CompTIA credential	Linux/K3S servers LMS and device infrastructure	On-site IT work banking/business installs	Embedded OS HeliOS camera device stack

TARGET STACK	
Security Security+, threat modeling, risk assessment, OWASP, Nessus/ZAP, RBAC/authentication, vulnerability assessment	Linux / Infrastructure Linux, Bash, Docker, Kubernetes/K3S, Longhorn, CloudNativePG, AWS, SSH, server management
IT Support POS, VoIP, printers, workstations, diagnostics, deployment checklists, user support	Systems Rust services, embedded Linux, Buildroot/Gaia, observability, REST APIs, device deployment

RELEVANT EXPERIENCE	
Founder & Lead Engineer Prometheus Dynamics LLP	Mar 2023 - Present
- Founded and lead a robotics hardware/software company building affordable high-performance vision and control systems for FRC teams and education. - Designed and shipped HVS-Raze/Helios across PCB/CAD, embedded Linux, Rust backend services, Svelte UI, camera integration, assembly, testing, manufacturing coordination, and customer support. - Led a 50-unit initial production run through multiple prototype revisions; sold approximately 25 total units and supported/sponsored FRC teams during the season.	
IT Technician Kelly Services Canada	Mar 2024 - Jan 2026
Completed contract site installations for POS, VoIP, printers, monitors, workstations, diagnostics, packaging, and deployment support across banking and small-business locations.	
Robotics Instructor & Tech Lead Zebra Robotics / FVCA	Jul 2023 - Jun 2024
Taught robotics and programming to grades 1-12; deployed classroom systems including digital signage, cloud storage, CanvasLMS/K3S, and internal management tooling.	
Tech Mentor & Former Software Lead FRC 6390	Oct 2018 - Present
Mentor students across programming, electrical, mechanical, soldering, troubleshooting, controls, and match-season debugging.	

SELECTED PROJECT EVIDENCE + LINKS	
HeliOS Custom embedded Linux OS/image stack for Prometheus camera hardware, CM5 deployment, backend services, UI assets, and CV runtime. Find: github.com/Prometheus-Dynamics/HeliOS	Orion Distributed node runtime with client SDK, operator CLI, control/data-plane split, transports, observability, auth, and audit surfaces. Find: github.com/Prometheus-Dynamics/Orion
Lemnos Hardware discovery, driver matching, and runtime interaction layer across GPIO, PWM, I2C, SPI, UART, USB, and Linux backends. Find: github.com/Prometheus-Dynamics/Lemnos	HVS-Raze / Helios Shipped CM5 robotics vision camera: custom PCB/CAD, Rust backend, Svelte UI, camera driver work, assembly, and support. Find: prometheus-dynamics.ca/products/helios-vision-system-raze
FVCA LMS / Portal K3S, Longhorn, CloudNativePG, CanvasLMS deployment, and internal tools for a 100+ daily-user classroom environment. Find: private deployment; screenshots/demo available	BrainStation VISION AI healthcare security review: threat modeling, third-party risk, network/data security, and business-continuity planning. Find: work sample available
American Express Project Team-led risk assessment and threat modeling for an AI fraud-detection banking concept. Find: work sample available	Styx Sync-first zero-copy Rust media pipeline stack for capture, decode, transform, graph integration, recording, and service workflows. Find: github.com/Prometheus-Dynamics/Styx

ADDITIONAL EXPERIENCE	
Byte Camp Lead Instructor Jul 2022 - Apr 2023 Taught Blender, Godot, Scratch, programming fundamentals, 3D/game projects, and youth technical camps.	McDonald's Crew Trainer Aug 2021 - Nov 2022 Trained new staff, handled fast-paced service operations, safety/sanitation, and practical team communication.

EDUCATION & CREDENTIALS			
Simon Fraser University BASc, Mechatronic Systems Engineering Started Spring 2025 - Expected 2029/2030 Co-op eligible	CompTIA Security+ SY0-701 Active Jul 2024 - Jul 2027	BrainStation Cybersecurity Diploma Completed Jul 2024	North Surrey Secondary Honours Graduate Completed Jun 2023