



PROFESSIONAL SUMMARY

Software Engineer and Acute Care Nurse Practitioner with more than ten years of clinical experience in Critical Care and Emergency Medicine. I bring a unique perspective to solving problems at the intersection of technology and sensitive environments, like healthcare. I enjoy gaining a comprehensive understanding of low-level details in complex systems and leveraging diverse experiences to design thoughtful solutions. I am especially interested in software architecture, vulnerability detection, risk mitigation strategies, and workflow optimization projects.

PROFESSIONAL INTERESTS

Security Engineering · Artificial Intelligence · Software Architecture · Workflow Automation · Healthcare Informatics

TECHNICAL SKILLS

Proficient Languages: Java · Python · C

Working Languages: TypeScript · Rust

Frameworks: Spring Boot · Node

AI/ML: LLM orchestration · retrieval-augmented generation · multi-agent systems · neural networks

Security: CompTIA Security+ · Network Security · pfSense · Network Segmentation · HTB AI Red Team Track

Deployment Tools: GitHub · GitLab

Environments: Linux · Windows · MacOS

SELECTED PROJECTS

SynapSys

- LLM orchestration framework for rapidly deploying AI agents using a custom API

Portfolio Chatbot

- RAG system over SynapSys for interactive portfolio chat interface

Cardiac Rhythm Series

- Cardiac rhythm analysis and classification using custom ResNet model and convolutional neural network

Additional Engineering Work

- Several workflow optimization projects, including Epic documentation workflow improvements, machine learning based employee scheduling system, and other open-source applications on GitHub

EDUCATION

M.S. Computer Science — Drexel University	2022–2026
Graduate Certificate, Computational AI — Drexel University	2024–2025
M.S. Nursing — The Pennsylvania State University	2015–2017

CLINICAL & OPERATIONAL EXPERIENCE

WellSpan Pulmonology & Critical Care Medicine — Nurse Practitioner	2019–Present
• Independently manage high-acuity adults with critical medical and surgical pathology • Identify and address workflow, documentation, and system inefficiencies as an Epic Physician Builder	
Hershey Medical Center Emergency Medicine — Nurse Practitioner	2017–2019
• Emergency medicine practice in high-volume, academic, level 1 trauma center	
Registered Nursing Roles	2013–2017
• Progressive care, emergency medicine, cardiopulmonary step-down, clinical instruction	

ABSTRACTS & PUBLICATIONS

ENRS Abstract — Heart Failure Terminality and End-of-Life Decision making	2017
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CREDENTIALS & RECOGNITION

CompTIA Security+	2026
ISC2 CC	2025
Epic Physician Builder	2024
Graduate Fellowship Award — The Pennsylvania State University	2023
Advanced Practice Provider of the Year — Hershey Medical Center	2019