

PAUL JANG

pjang2003@gmail.com · (443) 603-8247 · github.com/pjang123 · pjang.dev

Education

University of Maryland, Baltimore County

Baltimore, MD

B.S. in Computer Science — May 2025

Certifications

- CompTIA Security+ (SY0-701) — January 2025

Skills

Languages: Java, PowerShell

Networking & Security: pfSense, WireGuard, Tailscale, Snort IDS

Cloud & Virtualization: Docker, Proxmox VE, VMware, AWS

Monitoring: Prometheus, Grafana, Zabbix

Operating Systems: Windows, macOS, Linux, OpenWrt

Tools & Platforms: Active Directory, Redis

Work Experience

Distributed Game-Server Orchestration Platform

June 2026

Independent Project

- Designed a distributed system provisioning an isolated, ephemeral Docker container per match, eliminating idle compute via automatic teardown at completion.
- Engineered a pure-JDK orchestration layer with TCP readiness probes and Redis-based routing events to a Velocity proxy for seamless player transfers.
- Instrumented the stack with hand-written Prometheus exporters and Grafana dashboards for real-time match and health observability, deployed on a self-hosted Proxmox node.

Home Network Security Stack

July 2026

Independent Project

- Engineered a production-grade network security stack on a Raspberry Pi 4 (OpenWrt) with full WAN/LAN separation, blocking over 251,000 malicious and ad-serving domains via DNS.
- Configured a self-hosted WireGuard VPN server from scratch with public-key cryptography and full DNS filtering enforced on connected clients; integrated Tailscale as an independent access layer.
- Hardened the system with SSH key-only authentication and forced DNS redirection, and provisioned a containerized Prometheus/Grafana stack for real-time telemetry.

Wize Construction

February 2025

Independent Project

- Deployed a Windows Server 2025 Domain Controller and Windows 11 client via VMware, standing up a new Active Directory forest and domain (pjang.local).
- Automated user account and security group provisioning with custom PowerShell scripts, reducing manual setup time by 60%.
- Enforced GPOs for password, lockout, and desktop policies, and configured Windows Server Backup for disaster recovery.

Private Cloud Infrastructure with Proxmox

January 2025

Independent Project

- Installed and configured Proxmox VE on dedicated hardware, deploying VMs and LXC containers to simulate enterprise private cloud infrastructure.
- Deployed pfSense as a firewall/VPN gateway with VLAN-segmented LAN/DMZ/WAN networks and Snort IDS for defense-in-depth.
- Integrated Zabbix and Grafana for monitoring, automated backups via Proxmox Backup Server, and centralized RBAC via LDAP-integrated Active Directory.

Leadership & Activities

Korean Student Association (KSA)

Baltimore, MD

Vice President (Sep 2023 – June 2024), Secretary (Sep 2022 – June 2023)

- Spearheaded outreach to external corporations and campus organizations to facilitate large-scale fundraisers and cultural events.
- Directed executive meetings and operational decision-making as the primary liaison for cross-functional stakeholder engagement.
- Engineered targeted newsletters and promotional campaigns that sustained a 90% attendance rate while managing administrative documentation.