

Jonathan A. Shin

PE, PMP, MBA

PROFESSIONAL SUMMARY

Facilities and infrastructure leader with 13+ years of experience across data center operations, utility infrastructure, and capital programs. Currently leads critical facility infrastructure operations for a high-availability data center, with deep prior experience in utility infrastructure design, construction, and lifecycle modernization across complex sites. Licensed PE, PMP, and MBA experienced in applying codes and standards, evaluating operational risk, and translating technical issues into practical decisions. Inspired by the built environment and committed to strengthening institutions and communities through thoughtful, fair oversight in service of the public.

SELECTED QUALIFICATIONS

- ❖ Lead critical-environment operations for a high-availability data center, directing a multidisciplinary facilities team responsible for a significant portfolio of maintenance activities and infrastructure projects.
- ❖ Designed, constructed, and modernized utility infrastructure across complex campuses and facilities, including data center installation projects.
- ❖ Licensed PE, PMP, and MBA with experience translating infrastructure risk into capital priorities and operating strategies, supported by longstanding residency and community involvement in Howard County.

AREAS OF EXPERTISE

Data Center Operations | Utility Infrastructure | Critical Systems Reliability Capital Planning | Design & Construction | Master Planning | Environmental Health and Safety Management | Codes & Standards | Infrastructure Risk

PROFESSIONAL EXPERIENCE

MICROSOFT

Critical Environment Operations Manager | Mar 2025 – Present

- Lead operations and maintenance for a high-availability data center, with responsibility for critical electrical distribution, cooling infrastructure, and building controls.
- Direct facilities staff and service partners executing preventive maintenance, incident response, and infrastructure projects under rigorous change-control requirements.
- Evaluate asset condition, reliability risk, and lifecycle needs to prioritize repairs and capital improvements while sustaining continuous operations.
- Coordinate infrastructure reliability, lifecycle planning, and code compliance with regional and global stakeholders.

Critical Environment Program Manager | Nov 2023 – Mar 2025

- Managed facility maintenance programs across external service partners, establishing performance expectations and program governance for critical facility systems.
- Developed project controls for a national capital improvement program, coordinating design and construction activities around active operations.

MITRE CORPORATION

Site Operations Manager | Mar 2023 – Nov 2023

- Directed operations for a regulated research facility supported by critical power, central cooling, and building automation systems.
- Led a multidisciplinary site team and service providers, coordinating maintenance, emergency preparedness, and infrastructure changes with mission requirements.
- Developed facility investment and space-utilization plans by integrating occupancy demand, system capacity, and long-term organizational needs.
- Served as the principal site interface for facility issues, translating technical conditions into recommendations for organizational leadership.

FEDERAL GOVERNMENT

Program Manager | Mar 2022 – Mar 2023

- Led lifecycle planning and infrastructure renewal across 20+ facilities, converting identified deficiencies into prioritized replacement projects based on condition, mission impact, and cost.
- Developed a building automation modernization strategy across 40+ locations, improving system visibility, control consistency, and infrastructure reliability.
- Advised on electrical and mechanical infrastructure for new overseas facilities, supporting design development, construction coordination, and commissioning.

Project Manager, Facility Operations | Oct 2020 – Mar 2022

- Oversaw a large design and construction portfolio, including a major recapitalization program, aligning project scope with lifecycle needs, operational risk, and long-term priorities.
- Developed multi-year capital plans that sequenced utility upgrades and facility modernization around continuing operations.
- Delivered complex renovations and relocations by coordinating shutdowns, construction phasing, and stakeholder requirements.

Design Manager & Mechanical Engineer, Design & Engineering | Sep 2012 – Oct 2020

- Led multidisciplinary architectural and engineering design for HVAC, plumbing, and building automation systems, with emphasis on code compliance and maintainability.
- Designed plumbing, HVAC, mechanical, and BAS systems for data centers, technical spaces, offices, auditoriums, and mixed-use facility environments.
- Provided technical oversight through design, construction, and commissioning to resolve field conditions and protect long-term system performance.
- Led emergency response during major power disruptions, coordinating engineers and technicians supporting 250+ electrical substations to restore reliable service.

EDUCATION & CREDENTIALS

- ❖ **M.B.A.** Real Estate and Infrastructure, Leading Organizations – Johns Hopkins University
- ❖ **B.S.** Mechanical Engineering – University of Maryland, College Park
- ❖ **Professional Engineer License (43749)** – Maryland
- ❖ **Project Management Professional (3380440)** – PMI
- ❖ **2025 HCC Math Appreciation Week Speaker** – Math in Our Buildings
- ❖ **2023-2025 Vice President of Fundraising** – Local Community Elementary School PTA
- ❖ **2019 Facility Conference Speaker** – Emergency Facility Engineering Response in Power System Stabilization