

DOMINICK ALEXANDER VASKE

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EDUCATION

Columbia University in the City of New York

New York City, NY

Master of Science in Computer Science, GPA: 4.03/4.0

May 2024 – Dec 2026 (Anticipated Degree Conferral)

- Relevant Coursework: Artificial Intelligence, Algorithms, Advanced Programming in C, Data Structures in Java

University of Pennsylvania

Philadelphia, PA

Bachelor of Science in Systems Engineering with Mathematics Minor, GPA: 3.51/4.0, Cum Laude

Aug 2014 - May 2018

- Relevant Coursework: Computer Systems, Embedded Systems and Microcontrollers Lab, Signal Processing

PROFESSIONAL EXPERIENCE

United States Merchant Marine Academy

Kings Point, NY

Instructor of Naval Science and Security Manager

Jul 2023 - Present

- Advocate on behalf of Department of Naval Science to Education and Leadership Committees, offer strategic insights and recommendations for continuous enhancement to the Dean of Academic Affairs and Superintendent, mentor student body
- Orchestrate comprehensive security clearance program for 1000 midshipmen, ensuring compliance with stringent security protocols
- Enhance and implement curriculum for freshmen midshipmen providing foundational knowledge on Naval Science

United States Navy, Submarine Officer

Norfolk, VA

Officer of the Deck / Ship's Duty Officer / Assistant Weapons Officer

May 2020 - Jun 2023

- Performed rotating shift work at sea / 100 hours per week in port
- Qualified Officer of the Deck (OOD) and assumed responsibility as Captain's direct representative, overseeing safe operations and task execution while at sea for crew of 120 men and a \$1 billion warship
- Qualified Ship's Duty Officer, leading complex maintenance schedule of over 100 critical maintenance operations when in port to maintain ship's operational schedule
- Managed three divisions within Weapons Department encompassing approximately 50 personnel, ensuring optimal functioning and maintenance of critical Sonar, Fire Control, and Torpedo systems

PROJECTS

Custom HTTP Web Server

- Built HTTP/1.0 web server in C to serve static HTML pages and dynamically fetched database entries via TCP socket communication
- Integrated TCP-based database lookup service to serve MDB records based on user query parameters
- Implemented file permission enforcement (644/711) and directory traversal protection to mitigate unauthorized access

Song Genre Classification

- Built supervised learning pipeline using PCA for dimensionality reduction and k-Nearest Neighbors for classification, achieving 90% accuracy on a labeled test set
- Preprocessed song feature vectors, tuned model hyperparameters, and visualized principal components to understand genre clustering
- Led iterative model refinement informed by genre clustering analysis and model performance metrics

SKILLS

Programming: Python, C, Java, HTML, CSS, JavaScript in addition to experience with HTTP servers, TCP/IP protocols, systems programming, debugging and performance optimization

Leadership & Management: Led diverse deployment teams in operationally intensive environments, recognized by crew across multiple deployments as positive Wardroom influence, and consulted by senior administrators on leadership committees

Systems Engineering: Commanded complex submarine systems, streamlined workflows, demonstrated strong analytical and engineering problem-solving skills

NAVAL TRAININGS, CERTIFICATIONS, AND AWARDS

Top Secret Level Clearance, March 2025 renewal, Awarded Top Secret - Sensitive Compartmented Information (SCI) level clearance for performing missions related to national security aboard nuclear submarines

D-SAACP Certified Victim Advocate, January 2024, Trained and certified by the Navy to support individuals affected by sexual assault, demonstrating trust, empathy, and crisis-response leadership

Two Navy Achievement Medals, 2021 and 2023, Celebrated for superior team-managing during deployment as Engineering Officer of the Watch, for supervising critical engineering operations, for resolving conflicts as the deployment primary Contact Manager during missions, and for demonstrating exceptional leadership in high-pressure operational environments