Matthew Doutt

Charleston, South Carolina | 724-584-8023 | mdoutt98@gmail.com | LinkedIn Profile

MULTIDISCIPLINARY ENGINEER

Education

Master of Science in Computer Science | Spring 2026 (Expected)
Georgia Institute of Technology – Atlanta, GA
Specialization: Machine Learning

Master of Engineering Management | 2022 | GPA 4.0/4.0
Old Dominion University – Norfolk, VA

Bachelor of Science in Mechanical Engineering | 2015 | GPA 3.6/4.0
The Pennsylvania State University – University Park, PA
Minors: Engineering Mechanics, Economics
Awards: PPG Industries National Merit Scholarship

Professional Development

Naval Nuclear Power School (Officer) | 2016
NPTU Charleston
Coursework in Electrical Engineering, Reactor Dynamics, Nuclear Physics, Mathematics, Fluid Dynamics, Applied Hydraulics, Thermodynamics, Materials Science, Chemistry, Reactor Plant Technology & Operations

Naval Nuclear Power Program Qualifications | 2016 - 2022
NPTU Charleston
Supervisor In-Hull Training, Engineering Duty Officer, Auxiliary Control Room Supervisor, Engineering Officer of the Watch, Crew Training Engineer, Instructor Station Supervisor

Online Certificate Coursework (EDX) | 2023
GTx CS1301: Introduction to Python Programming
GTx CS1331: Introduction to Object-Oriented Programming with Java
GTx CS1332xI, xII: Data Structures and Algorithms

CORE COMPETENCIES

Software Development & Testing • Azure DevOps • Engineering Support • Computer Hardware
Java, Python, SQL, MATLAB, Visual Basic for Applications • 3D Modeling in SolidWorks • Technical Writing
Training & Development • Data Analysis & Reporting • Regulatory Compliance • Operations Management

CAREER OVERVIEW

NAVAL NUCLEAR LABORATORY | 2015 - Present
PRINCIPAL SIMULATION ENGINEER at Nuclear Power Training Unit – Naval Weapons Station – Charleston, SC

- Software Technical Expert for several full-scale propulsion plant simulators, task-focused simulators, and a 3D Virtual Training Environment.
- Maintain software codebase of applications and initial reactor plant configurations for all simulator operation.
- Identify, document, and resolve fidelity issues in Nuclear Plant simulators (thermal-hydraulics model, BOP, etc.)
- Collaborate with technical experts across laboratory sites to diagnose and replicate simulation software bugs.
- Conduct simulator response testing following planned and unexpected simulator shutdowns.
- Lead simulator software release testing and participate in software Configuration Control Committee meetings.
- Present lectures and conduct hands-on training sessions with Navy Simulator personnel to enhance their understanding of simulation hardware, software, and local operating procedures.
- Lead VIP tours for external agencies (NRC, DOD, etc.) of NPTU Charleston's $500MM Simulation Suite.

- Conduct technical interviews and operational monitoring for NNL and Naval Reactor's audits.
- Possess an active DOE L Security Clearance and previously held a DOE Q clearance.

SENIOR REACTOR OPERATIONS ENGINEER at NPTU-CHS and Norfolk Naval Shipyard - Norfolk, VA

- Supervisor of forward safety system installation and testing on the USS San Francisco (SSN-711) during its conversion to a moored training ship at Norfolk Naval Shipyard.
- Senior technical instructor responsible for training and certifying Navy and Civilian personnel on both theoretical and operational aspects of nuclear propulsion systems in support of maintaining a strong US Naval fleet.
- Designated by Commanding Officer as a Senior Supervisory personnel required to be stationed for high risk or complex maintenance.
- Supervised a nuclear trained watch team consisting of 20 sailors, with documented nuclear reactor and steam system startups and shutdowns and a recorded 2,000+ hours supervising nuclear plant operations.
- Lead briefings with naval and civilian chain of command outlining procedures to be used and risk mitigation strategy for evolutions/maintenance which are dynamic or complex.
- Assisted engineering groups through review, authorization and implementation of technical procedures for preventative and corrective maintenance.
- Personally mentored 50+ Officer students in the Naval Nuclear Propulsion Program on leadership and development resulting in consistent on-time qualification. Received positive reviews from students under my direction.
- Directed and responded to casualty situations as a member of the NPTU Site Emergency Response Organization.

BECHTEL MARINE PROPULSION CORPORATION | Summer 2014
Technical Intern at Bettis Atomic Power Laboratory— West Mifflin, PA

- Drafted Piping & Instrumentation Diagrams in AutoCAD for heating and cooling system installation.
- Developed Preventive Maintenance documentation for heat exchanger, pumps, and boiler systems.
- Engineered a large-scale heating solution for an upcoming building renovation in accordance with ASME safety guidelines.

THE J.M. SMUCKER COMPANY | Summer 2012
Process Engineering Intern at the J.M. Smucker Co. Food Manufacturing Plant – New Bethlehem, PA

- Created 3D Models for new installation of a shell-and-tube heat exchanger system.
- Developed new training documentation to optimize operator training and assembly line changeovers.
- Compiled a comprehensive inventory list for critical equipment, outlining the spare parts required to maintain continuous operation of the assembly line.