Duke D. Hughes

12704 Jarmann Road, Knoxville, TN 37934 +1 (386) 214-2276 duke.d.hughes@gmail.com

Professional Summary

Dynamic leader with 15 years of demonstrated technical, functional, and project management experience on complex projects and equipment within DOE systems and in private industry. Knowledgeable and experienced in the management of personnel performing product lifecycle activities from R&D through end of life closeout. Adept at motivating others through leadership by example and the application of interactive management strategies.

Core Qualifications

- Technical leadership and acumen
- Project management and execution (small to large)
- Ability to achieve goals through interactions at all organizational levels
- Extensive experience working on DOE projects
- Systematic approach to problem solving
- Effective communicator
- Adapts well in dynamic environments

Career History & Accomplishments

Tokamak Cooling Water System Team Lead (US ITER) UT-Battelle (ORNL), Oak Ridge, TN 2019 - Present

- Lead the team responsible for both the design and delivery of Tokamak Cooling Water System (TCWS) equipment to the ITER Organization with an EAC of ~\$380M
- Assure Control Account Managers are delivering their responsible scope on time and within budget
- Drive and support the transition of the TWCS equipment from the design phase into procurement

CS Structure Control Account Manager (US ITER) UT-Battelle (ORNL), Oak Ridge, TN 2015 - 2019

- Managed the timely execution of ~\$90M of project scope over 5 years (> .9 SPI)
- Led a cross-functional project team of ORNL employees, contractors, and project support personnel
- Responsible for the delivery of robust, manufacturable CS Structure designs
- Held suppliers accountable for project budget and schedule
- Worked in a multinational environment with foreign counterparts on a daily basis
- Frequent reporting and presentations to the US ITER project office, the US Department of Energy, and representatives of the ITER Organization

Engineering Services Manager

Centrus Energy, Oak Ridge, TN

2013 - 2015

- Led and managed a team of 15 engineers and scientists responsible for the analysis, reliability, materials, and manufacturing of advanced gas centrifuges
- Our group supported all aspects of Centrus' business including design engineering, manufacturing, and operations
- Served as the Integrated Product Team (IPT) Lead for centrifuge machine final assembly providing
 engineering support for all aspects of assembly, including tooling and process.

Senior Manufacturing Process Engineer

Walt Disney Co., Lake Buena Vista, FL 2012 - 2013

- Identified process improvement opportunities, developed project scope, and led or coordinated the successful completion of various manufacturing projects
- Provided design / build project support, to include front end design through installation, while ensuring creative integrity was maintained throughout the entire process

• Provided leadership and mentoring to Industrial Engineering interns and contractors, setting direction to align with departmental goals, and created accountability through weekly meetings

Process Engineering and Design Interface Manager

USEC, Inc., Oak Ridge, TN

2011 - 2012

- Managed and led a team of 20 manufacturing engineers, design engineers, and engineers designated
 as component disposition authority responsible for manufacturing process development, tooling
 design, and disposition of nonconforming hardware
- Served as the single point design and configuration control interface between the engineering and manufacturing organizations

Engineering Interface Manager

USEC, Inc., Oak Ridge, TN

2008 - 2011

- Managed and led a team of 12 engineers and manufacturing technicians with overarching responsibility for technology transfer to strategic suppliers
- Managed a \$7.5M annual departmental budget
- Served as the IPT Lead responsible for all phases of product development, from design through installation, of high consequence gas centrifuge components
 - Managed fixed price contracts exceeding \$210M in value
- Recipient of 2009 USEC EIII President's Award for solving an issue affecting assembly of AC100 Centrifuges

Manufacturing Engineer

USEC, Inc., Oak Ridge, TN

2006 - 2008

- Led a team that purchased ~\$25M of capital manufacturing equipment
- Led technology transfer of small batch production processes from the R&D activities and aided in development of scaling processes to high rate production
- Supported design for manufacture and assembly (DFMA) initiatives through periodic drawing reviews

Mechanical Engineer III

State of Florida EIT # 1100008139

B&W Y-12, Oak Ridge, TN

2005 - 2006

Led plant directed research and development project (\$65k scope)

Successfully Completed ASEM Engineering Management Certificate Program

- Determined optimal manufacturing methods and processes for small batch tooling and complex weapons components and assemblies
- Recipient of 2006 Defense Program Award of Excellence for contributions to the stockpile stewardship program (NNSA)

Education

Project Leadership Institute Stanford University and Department of Energy Cooperation	2020 Cohort Stanford, CA
Master of Science: Mechanical Engineering University of Florida	2005 Gainesville, FL
Bachelor of Science: Mechanical Engineering, Minor: Materials Science University of Florida	2002 Gainesville, FL
Relevant Certifications	
Certified Project Management Professional # 2139727 (PMP) by PMI	2017
Lean Six Sigma Green Belt Certified by the George Group	2009

2006

2003