

# BRAD DEEMER

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## SUMMARY OF QUALIFICATIONS

### Senior Leadership in Controls and Automation Engineering

Design Innovation | Global Scalability | Sales Support | Agile Development

**Controls and automation engineer with 14 years' experience developing complex, turnkey control solutions; cumulative value of >\$1B industrial equipment assets and 80+ years of zero-incident runtime** for a global leader in the energy industry. Management-level accountability for project scope, design, development, testing, installation, commissioning, user training, and maintenance. Proactive problem solver and first-principle thinker.

**BS degree in physics with electrical and mechanical engineering concentration; broad technical expertise.** Active listener with exceptional verbal and written communication skills that support team leadership, mentoring, training, cross-functional collaboration, stakeholder relationships, executive presentations, and technical writing.

Spearheaded Creation of Globally Standardized Offshore Master Control Station (MCS)  
Awarded for Development of Revolutionary FRAC Pad Automation System  
Scaled Solutions to Generate \$MM New Annual Revenue and Reduce Operating Costs

## PROFESSIONAL EXPERIENCE

### TECHNIPFMC, UCOS CONTROLS AND AUTOMATION, LONDON, UK

2009–PRESENT

*Global leader in industrial energy technologies, systems, and services for subsea and surface projects.*

#### **Senior Systems Engineer, User-Configurable Open System (UCOS) Software and Hardware**

Collaborate with cross-functional internal teams, IT professionals, customers, and other stakeholders to design, develop, and implement complex control solutions for the energy industry. Support definition of software architectures and development tools to impact engineer productivity. Lead innovation strategy to ensure systems can be easily scaled and configured during runtime by unspecialized technicians. Mentor engineers in best practices for customer experience, reliability, safety, and cost reduction.

**Technology Tools:** Agile Software Development, Software Architecture Design, Object Oriented Programming, Version Control, Scrum, Programming (C/C#/C++), Virtualization, Containerization, Kubernetes, Programmable Logic Controllers (PLC), Cause & Effects, Interlocks, Sequencing, P&IDs, IO Lists, Intuitive Graphical User Interface (GUI) Development, User Management, Historical Data Storage, Reporting, Trending, Alarming, Proportional Integral Derivative (PID) Control, Tuning, Safety (SIL), Reliability, Redundancy, Fail Safe Enablement, State Engines, Operational Modes (Complete list below.)

- **Prevented \$MM user errors, reduced operational costs,** and increased customer satisfaction by creating automatic, one-click frac phase transition valve sequencer.
- **Resolved scalability issues,** reduced quality escapes, and eliminated need for specialized configuration of emission control system by addressing problems with system architecture and best practices.
- **Reduced refactoring timeline, commissioning downtime,** and quality issues by creating automated tool.
- **Facilitated on-time deliveries, fewer quality escapes,** and less engineer burnout by developing internal YouTube-based training videos.

#### **Global Products Responsible Engineer | Product Development and Implementation, 2016–2021**

Managed complex global development products comprising hardware, software, and configurations. Collaborated with engineering team to develop and integrate applications. Liaised with product managers and field service technicians to enable and supervise successful deployments.

## PROFESSIONAL EXPERIENCE (Continued)

- **Enabled \$MM annual sales**, decreased operational costs, reduced expensive operator errors, and improved customer satisfaction by developing FRAC Pad Automation System.
- **Reduced lead time, costs, and configuration-based errors** by creating MDIS functionality for integration.
- **Improved usability and quality of UCOS software**, working with developers to close thousands of defects.
- **Increased customer satisfaction, reduced costs**, and raised standards for UCOS applications by developing runtime-configurable controller for Lease Automatic Custody Transfer (LACT).

### Applications Manager | Team Lead, 2012–2016

Standardized and packaged functionality into applications that enable configure-to-order project deployments on a global scale. Delivered solutions from concept to commissioning, using self-created, milestone-based execution plans. Established an environment of collaboration, professionalism, and excellence.

- **Reduced quality escapes and increased customer satisfaction** by fostering a professional team culture, defining processes and methods, creating documentation standards, and establishing test protocols.

### Controls Applications Engineer, 2009–2012

Led creation of algorithm based, user-friendly, real-time, fault-tolerant, embedded control systems. Collaborated with programmers to advance functionality within proprietary software-based controls platform. Defined and executed formal test procedures at all levels including software, hardware, unit, system, and integration.

- **Enabled \$10M+ annual new revenue and unprecedented growth** by creating globally standardized offshore MCS and facilitating the deployment of the system to 6 continents.
- **Conducted due diligence** for successful acquisition of Control Systems International by TechnipFMC.

## EDUCATION AND CERTIFICATION

### UNIVERSITY OF CALIFORNIA, IRVINE

#### Bachelor of Science in Physics, Concentration in Mechanical and Electrical Engineering, 2009

**BOSIET Certification**; H2S and Escape System training; continuing education in CAD, CAM, CNC, and 3D printing.

## TECHNOLOGY

### Controls and Automation

Supervisory Control & Data Acquisition (SCADA), Distributed Control System (DCS), Communication Protocols, Modbus, Profibus, CANBus, EtherIP, OPC, Programmable Logic Controllers (PLC), Cause & Effects, Interlocks, Sequencing, P&IDs, IO Lists, Intuitive Graphical User Interface (GUI) Development, User Management, Historical Data Storage, Reporting, Trending, Alarming, Proportional Integral Derivative (PID) Control, Tuning, Safety (SIL), Reliability, Redundancy, Fail Safe Enablement, Asset Integrity, Process Optimization, Machine Learning, Automated Testing, State Engines, Operational Modes, Retentive Setpoints, VFD Control, Valve Signatures, Hydraulics, Pneumatics, Metering, Instrumentation, Sensors, Flow Computers, Ticketing, API Standards, Industrial Panel Design, Wiring, Termination, NEMA Standards, Ingress Protection (IP), Mimic Panels, Emergency Shutdown (ESD), Hierarchy, Trip Conditions, Hazardous Area Classifications (CxDy), Intrinsically Safe Hardware Design

### Computer Sciences

Agile Software Development, Software Architecture Design, Object Oriented Programming, Version Control, Scrum, Relational Databases, Structured Query Language (SQL), Open Database Connectivity (ODBC), Computer Networking, OSI Model, DHCP, DNS, NTP, IPs, Ports, Gateways, Subnets, UDP, TCP, Local & Wide Area Networks (LAN/WAN), Network Troubleshooting, Windows, Linux, Command Line, Terminal Services, Programming (C/C#/C++), Scripting, Encryption, Compression, Store & Forward, Virtualization, Containerization, Kubernetes