# (Remote) model Based Quality Principal Engineer

### **Apply for This Job**

**About This Job** 

**Company: Belcan** 

**Location: Remote** 

**Category: Other-General** 

(Remote) Model Based Quality Principal Engineer

Job Number: 359111

Category: -Engineering & Design SBU

Description: A remote Model-Based Quality Principal Engineer job is currently available at Belcan.

This is a full-time direct position with benefits.

To be considered, you will need 1+ years of experience reusing Model-Based Definition (MBD) within either the quality, manufacturing, or metrology domain, and 8+ years of documented experience as a subject matter expert (SME) in any of the following domains: Quality, Manufacturing, Metrology, or Supply-chain.

As an MBQ Principal Engineer, you will assist in establishing standard practices for Belcans Digital Engineering Center of Excellence (COE) and/or lead and execute tactical tasks as part of customer-aligned digital engineering delivery teams.

#### Job Duties:

\* Work will be performed remotely.

Some travel to customer sites or internal meetings may be required (up to 25%).

- \* Assist in establishing standard practices for Belcans Digital Engineering COE and/or execute tactical tasks as part of customer-aligned digital engineering delivery teams.
- \* Complete the following responsibilities as they relate to Model-Based Quality to comply with industry standards, maximize downstream digital interoperability and enable automated consumption:
- o Engage with vendors in the evaluation, development, debugging, and evolution of Quality, QMS, Manufacturing, and Metrology software and maintain awareness of emerging engineering and consumption lifecycle software and technologies
- o Participate in industry standards development organizations; DMSC, ASME, AIAG
- o Baseline and document customer current-state quality, manufacturing and metrology standards and participate in customer short-, middle-, and long-term future state development and maturity planning
- o Advise on the application of Geometric Dimensioning and Tolerancing (GD&T) for improved measurability within common metrology software.
- o Advise on modernizing MBD authoring techniques that are interoperable with Quality Management Systems (QMS), Manufacturing, and Metrology software and systems
- o Develop a model-based characteristic strategy stemming from the authority MBD model and extending into QMS, Manufacturing, and Metrology software and systems for end to end traceability of characteristics
- o Participate in pilots to collect feedback and develop solutions for definition approaches, Quality management Systems, manufacturing and inspection data re-use, machine and software interoperability, and other efforts.
- o Assist in testing and documenting best practices for the interoperability of engineering data within Quality, Manufacturing, and Metrology systems and tools and all related artifacts
- o Develop formal specifications, process maps, and workflows for internal and customer usage that captures key requirements and processes.
- o Develop and deliver internal and customer-facing presentations and documentation using MS Office and other methods for clear communication o Plan, develop and provide guided training and mentorship for role specific responsibilities.

#### Required:

- \* US Citizenship
- \* Bachelors Degree in a mechanical design or engineering discipline.
- \* 1+ years of experience reusing Model-Based Definition (MBD) within either the quality, manufacturing, or metrology domain.
- \*8+ years of documented experience as a subject matter expert (SME) in any of the following domains: Quality, Manufacturing, Metrology, or Supply-chain.
- \* Experience/knowledge of industry standards ASME Y14.5-2009 or newer, ASME Y14.45-2021 or newer, ISO 23952:2020 (QIF), DMSC MB Characteristics, and AIAG APOP
- \* Experience/knowledge with developing or using common quality and metrology artifacts; Bill of Characteristics, Quality Control Plans, Work Instructions, Metrology Inspection Programs, and FAIR Templates
- \* Possess a growth mindset with personal desire to learn and create solutions
- \* Strong ability to forward think when architecting solutions, embracing new technologies and process changes
- \* Strong communication skills and relating new concepts to others
- st Ability to learn new technologies and identify applications to solve business challenges
- \* Experience working horizontally across functional organizations such as engineering, supply chain, manufacturing, and information technology
- \* Ability to remotely collaborate with a team of experts based in various locations throughout the US

#### Preferred:

- \* Ability to obtain and maintain a US Security Clearance
- \* Working knowledge of Product Manufacturing Information (PMI) and characteristics reuse in quality systems, manufacturing, and inspection

- \* Experience/knowledge of MBD interoperable formats such as 3DPDF, HTLM5, STEP, QIF, JT, etc.
- \* Experience/knowledge with maintaining and reusing a bill of characteristics using QIF within the quality and metrology domains.
- \* Advanced knowledge of GD&T and its application, Preferred GDTP ASME Y14.5 Certification.
- \* Experience/knowledge with common metrology systems (Polyworks Inspector, PC-DMIS, Zeiss Calypso), experience with developing CAI (Inspection) programs.
- \* Experience/knowledge with common CAD systems (NX, CREO, CATIA and Solidworks)
- \* Experience/knowledge of MBD application in CAD systems (NX, CREO, CATIA and Solidworks)
- \* Experience/knowledge with Quality Management Systems (QMS)
- \* Working knowledge of product life-cycle management (PLM) workflows for how engineering technical data is consumed across engineering, quality, manufacturing, and supply-chain.
- \* Experience with Lean & Agile practices
- \* Experience managing culture changes including adoption and resistance to new ways of working in a digital engineering environment

We provide a competitive pay and benefits package.

This position is offering a salary rate of \$160,000 to \$190,000 however, Belcan considers several factors when extending an offer, including but not limited to education, experience, geographic location, and discipline.

Benefits offered may include health care, dental, vision, life insurance; 401(k); education assistance; paid time off including PTO, holidays, and any other paid leave required by law.'

Belcan is an equal opportunity employer.

Your application and candidacy will not be considered based on race, color, sex, religion, creed, sexual orientation, gender identity, national origin, disability, genetic information, pregnancy, veteran status or any other characteristic protected by federal, state or local laws.

Location: Remote, RE

Minimum Experience (vrs): 10

Required Education: Bachelor (BA, BS...)

Salary: 0.00 /hour

Benefits:

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