



Example of Modeling Engineer Job Description

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Our innovative and growing company is hiring for a modeling engineer. If you are looking for an exciting place to work, please take a look at the list of qualifications below.

Responsibilities for modeling engineer

- Developing and maintaining regression testing to ensure model validity at all times
- Use the model to inform or lead design engineering through analysis and trade studies
- Develops system and component requirements, distributes function and performance to components within systems, defines system hardware and software architecture, defines electrical, mechanical, and communication interfaces for components to meet those goals
- Develop/modify/optimize/tune powertrain related plant models to achieved required level of plant model behavior
- Integrate and configure models, interfaces, and simulation tools to create complete vehicle SIL simulations
- Interface with powertrain and autonomous vehicle testing activities to understand simulation needs and functional/fidelity requirements
- This team is responsible for managing energy performance for Public Private Partnership (P3) Projects across the country
- Design and develop new power systems models to meet documented requirements for Simple Cycle and Combined Cycle Power Plant Components product line
- Demonstrate understanding of the Rankine cycle and able to predict the performance of a steam turbine system
- Responsibly document designs and procedures used in development and validation processes

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- Familiarity with battery system usage/controls and system interactions for electrified vehicles is desired
 - Working knowledge of MATLAB/Simulink required
 - Strong background in modeling of complex mechanical, electrical and thermodynamic systems in Matlab and Simulink
 - Experience in model validation and regression testing
 - Familiarity with system-level design tools, including state machines, flow-charts, functional specification systems, fault tree analysis, and failure mode and effect analysis
 - Greater than 4 years of engineering or academic experience on multiple products that have entered production