POSITION DESCRIPTION

<table>
<thead>
<tr>
<th>Job Title</th>
<th>Senior Modeling Development Engineer</th>
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<tbody>
<tr>
<td>Department</td>
<td>Engineering</td>
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<td>Reports to</td>
<td>TBD</td>
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<tr>
<td>FLSA Status</td>
<td>Full-Time/Exempt</td>
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**Job Summary:** Develop physics based and data matched computer models for complex heat transfer, acoustical, air flow and other HVAC processes to be included in energy simulation and equipment performance prediction software.

**Essential Responsibilities/Activities:**

- Develops computer software to model HVAC systems and components for inclusion in ECat sales software and other performance modeling tools.
- Understands standard software development concepts, practices, and procedures.
- Communicates with Product Engineering, Information Technology, Sales and management to develop software requirements and specifications.
- Analyzes test data to determine accuracy and completeness of software/product specifications.
- Provides 2nd tier technical support and technical documentation for energy and other modeling programs.
- Trains Applications Engineers and Field Representatives in modeling software use.
- Evaluates product applications using performance selection software.
- Recommends and implements modifications to performance selection software.
- Confers with engineering and sales management and software developers to complete assigned projects to determined schedule.
- Provides technical guidance and support to junior members of team.
- Maintains and builds professional and technical knowledge by attending educational workshops, reviewing professional publications, or participating in professional societies.
- Travels, when necessary, for third party testing or product review at field test sites.

**Education and Experience Requirements:**

**Degree(s):** Master’s Degree or higher in Mechanical Engineering or related filed. x
**License(s):** None
**Certification(s):** None

- 5 years in the HVAC industry or equivalent experience in a similar industry preferred.
- **Familiarity** with VB, C++ and C# programming languages.
• Familiarity with DOE II software or similar hour by hour energy calculation software.
• Familiarity HVAC testing procedures and test data.

Essential Mental Functions:

• Communicates effectively in written and spoken form.
• Exhibits good decision making and analytical problem solving abilities.
• Demonstrates strong multi-tasking capabilities and organizational skills.
• Works effectively in a team environment.
• Works effectively in a fast-paced high-pressure environment.

Essential Physical Functions:

• Lift up to 50lbs.
• Sit or stand for up to 95 percent of work hours.
• Periodic visits to the manufacturing facility with seasonal hot and cold temperatures, dust, and some chemical fume exposure.

Please note this job description is not designed to cover or contain a comprehensive listing of activities, duties, or responsibilities that are required of the employee for this job. Duties, responsibilities, and activities may change at any time with or without notice.