**Kevin D. Christman**

kevinchristman@tamu.edu | 979-862-3652

7607 Eastmark Dr., Suite 110, College Station, TX 77840

# Formal Education

|  |  |
| --- | --- |
| 2010-May | **Master of Science in Mechanical Engineering**  Texas A&M University (College Station, TX). Research chair: David Claridge, PhD |
| 2006-June | **Bachelor of Science in Engineering, concentration in Mechanical Engineering**  Walla Walla University (College Place, WA) |

# Professional Recognition

|  |  |
| --- | --- |
| 2014-June | **Professional Engineer**  Texas Board of Professional Engineers #117227 |

# Professional History

|  |  |
| --- | --- |
| 2010-Jan to present | **Mechanical engineer in Continuous Commissioning® software development group**  Energy Systems Laboratory at Texas A&M Engineering Experiment Station (College Station, TX)  Lead mechanical engineer for developing software to assist with the Continuous Commissioning® process. My role was software conception, design, validation, support, and lead a 7-person team of part-time programmers.  Software developed:   * Opportunity Assessor, a tool to estimate potential savings from doing existing-building commissioning * WinAM, a simulation tool designed for quickly predicting savings from energy-efficiency measures * Implementer, a tool to visualize and analyze HVAC trend data from building automation systems. * Validator, an automated M&V (measurement & verification) tool |
| 2007-Sept to 2009-Dec | **Graduate Student Researcher for David Claridge, PhD**  **Energy Systems Laboratory** at Texas A&M Engineering Experiment Station **(College Station, TX)**  **Performed research on novel methods to estimate in-situ power usage on electric motors in building applications.** |

# Skills

### Software Developer

* Strong skills:
  + C#
  + Clean coding philosophy
* Medium skills:
  + SQL database queries and table design
* Familiarity:
  + Javascript and Knockout
  + Python

### Engineering Design

* Skilled at going from a “need statement” to identifying engineering requirements and alternative solutions, to detailing designs, and finally delivering solutions.

### Building Automation Systems

* Sequence of Operations. Understand control sequences in AHUs, terminal boxes, and plants; have programmed in I/NET Seven.
* Trending. Worked with trend collection on many BAS platforms.

### Building Energy Modeling

#### Simulation Modeling

* WinAM—an hourly HVAC simulation program developed at ESL.
  + Created dozens of calibrated models for predicting savings from efficiency measures.
  + Designed high-level engineering for WinAM releases: 4.3, 4.4, 5.1, and 5.2.
* DOE-2

#### Data-driven Modeling

* Developed software to automatically create change-point models used for M&V (Measurement & Verification) of energy for buildings.

# Papers

Christman, K., J. Haberl, and D. Claridge. 2009. “Analysis of Energy Recovery Ventilator Savings for Texas Buildings”, *Proceedings of the 9th International Conference for Enhanced Building Operation*, ESL-IC-09-11-31, <http://hdl.handle.net/1969.1/90860>.

Christman, Kevin. 2010. “Methods for Rapid Estimation of Motor Input Power in HVAC Assessments,” M.S. Thesis, Department of Mechanical Engineering at Texas A&M University, ESL-TH-10-05-01, <http://hdl.handle.net/1969.1/ETD-TAMU-2010-05-7664>.