# Andrew L Holmes, PE

Principal Engineer alh@mdseng.com

## **Professional Profile**

Andrew is responsible for the production of design documents for MDS. Andrew is well versed in Autodesk REVIT MEP and prefers its implementation when possible. Andrew's construction experience resides in building construction and renovation. His understanding of building components and sub-space systems provides him foresight into the limitations of allocated mechanical space.

## **Employment History**

## Mechanical Design Services, Inc. (10/2011 – Present) – Vice President Huntsville, Alabama

Responsible for production of Contract Documents including but not limited to:

- Mechanical Load Calculations
- Sizing and Selecting Equipment
- Drafting HVAC, Plumbing, Mechanical Piping and Fire Protection system layouts using AutoCAD & Revit MEP.

## Mims Engineering Inc. (02/2006 – 10/2011) - Project Engineer Huntsville, Alabama

Responsibilities include project management and design of Mechanical HVAC & Plumbing systems and providing consultation for the Architect, Owner, and other Engineers. Tasks include but are not limited to:

- Load Calculations
- Sizing and Selecting Equipment
- Editing Specifications
- Job Submittal Review
- On site Field Inspections and Implementation
- Drafting HVAC, Plumbing, Mechanical Piping and Fire Protection system layouts using AutoCAD & Revit MEP.

## **Education**

College/University University of Alabama in Huntsville (- 05/2005) Huntsville, AL Degree: BSME – Major: Mechanical Engineering GPA: 3.17 Relevant Coursework, Licenses and Certifications:

- E.I.T. Passed Fundamentals of Engineering Exam on April 16, 2005
- IPT 2005 (Integrated Product Team): Modeling and Simulation research and analysis for guided projectile defense system. Analysis included determining estimated flight trajectories and impact properties.
- Design of Thermal Systems: Energy balance analysis of a desalination plant in a team setting.
- SLI (Student Launch Initiative): Participated in the launch and recovery of a rocket and performed analysis on the flight of the rocket.

Computer Skills acquired from educational study and during professional career are as follows:

- AutoCAD
- Microsoft Office (Word, Excel, PowerPoint)
- Miscellaneous Load Calculation Software and Equipment Selection Programs
- Microsoft Windows 98/2000/XP/7/10
- Apple OSX
- C++ programming
- I-DEAS 9 CAD/CAM-Mathcad

## **Professional Registration**

Alabama, 31626

## Additional Information

- Mitsubishi VFR Diamond Designer
- HAP hourly analysis load/energy analysis program Certification
- Revit Building Suite
- ASME Member