

Cory Knight

105 Patrick Dr. ♦ Weatherford, TX 76087 ♦ (682) 225-2811 ♦ coryknight@gmail.com

Education

2004-2006

The University of Texas at Arlington Arlington, TX

- B.S., Mechanical Engineering, Graduated Dec 2006

Engineering Work Experience

Sept 07–Present

Machine Design Engineer

Foresight Automation

Design numerous automated machines and systems using 3D CAD software. Manage large scale industrial projects from inception to completion. Responsible for working with end users to extract goals, create scope, develop processes, and invent innovative automated systems. Compose quotations, proposals, and technical manuals in addition to engineering documentation packages. Manage mechanical and electrical engineers and designers. Major achievements include:

- Designing and project managing a large scale, automated assembly line for a hydraulic motor manufacturer.
- Turnkey design, programming, and installation of robot cell for local defense contractor.
- Developing automated solutions for inspection, quality control, assembly, safety/ergonomics, and productivity.
- Engineering sales related activities such as working with clients to establish a SOW and creating partnerships with vendors and distributors.
- Composing multiple technical manuals for several gearbox test stands for BHTI.
- Designing automated back pressure relief valve system for local oil and gas equipment manufacturer.
- Integration of advanced automation components such as vision systems, laser displacement sensors, laser markers, metrology devices, servo/stepper motors, linear/rotary actuators, articulated robots, gearboxes, pneumatics and hydraulics, safety light curtains, safety scanners, safety interlock switches, RFID technology, linear/rotary encoders, aluminum extrusion, and transducers.

Aug 05–Sept 07

Mechanical Design Engineer

Heli-One USA (formerly Heli-Dyne Systems)

Designed numerous mechanical systems for diverse use in many different helicopters. Performed stress and tolerance analyses on assemblies and produced manufacturing, assembly, and installation drawings using AutoCAD/Mechanical Desktop, Inventor, and CATIA V5. Major achievements include:

- Designing interior and exterior aircraft systems for defense, EMS, VIP, police, etc.
- Creating installation, assembly, detail drawings for numerous systems.
- Converting 3-D parts to interchangeable CAM files for manufacturing.
- Gaining FAA certification for designs by form of 8110-3 and generation of STC packages.
- Checking engineering drawings and approving other engineer's drawings.
- Working closely with suppliers, vendors, and manufacturers in development of design.
- Working on writing an ODA (Organization Designation Authorization) Manual to become certified

Jan 05–Aug 05

Apprentice Process Engineer

Wolverine Tube Forming International

Produced BOMs (Bills of Material) for numerous Carrier/Trane assemblies.
Created product structure and routing for parts, experience with quality control and measurement.
Worked under senior process engineer using AutoCAD 2004® for drawing modification and customer support.

June 04– Sept 04

Full Time Research Intern

University of Texas at Arlington, Civil and Environmental Engineering; National Science Foundation (NSF)

- Performed tensile and fatigue tests on shape memory alloy (NiTiNOL) using an MTS 810 testing apparatus.
- Designed tensile samples to be fabricated.
- Analyzed data, accumulated results, and composed a technical publication

Presented findings to the *National Science Foundation*

Skills & Strengths

Computer Skills: **Mechanical Desktop**, , **Solidworks 2014, Pro E, AutoCAD, CATIA V5, ANSYS Workbench, RobotStudio**, Matlab, DySim, MS Office, MS C++

Effective Communicator, Organized, Efficient at working under deadlines and working in teams or alone