

HOWARD MACK

MECHANICAL DESIGN & DOCUMENTATION

.INVENTOR .SOLIDWORKS .AUTOCAD

635 STONEPARK LANE - SUWANEE, GA 30024
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SEE WORK SAMPLES

WWW.TECH3D.COM/PORTFOLIO

OBJECTIVE

Seeking Contract Opportunities to provide Mechanical, Machine, and Plastics CAD Design and Documentation to companies looking for highly skilled AUTODESK INVENTOR or SOLIDWORKS designers.

SOFTWARE SKILL SETS

- AUTODESK INVENTOR
 - Metal Fabrication
 - Frame Generator / Weldments
 - Sheet Metal
 - Surfacing / Plastics
 - Parts and Assembly Documentation
- SOLIDWORKS [Certifications]

CSWPA	C-TNS8ULYT3X
CSWPA-WD	C-RWDXERY8DP
CSWPA-SM	C-UVNWY5JKFZ
CSWPA-SU	C-QWXPVZS78Z
CSWPA-DT	C-5QDK8SWVNK

DISCIPLINES

- Metal Fabrication
- Weldments
- Sheet Metal
- Surfacing
- Plastics
- Fabrication Drawings
- Assembly Drawings
- Bills of Materials Maintenance
- Engineering Change Orders
- Document Release Cycles

SOFTWARE / HARDWARE

- Autodesk Inventor
- SolidWorks
- Office 365
- Dell Precision M6800 Laptop

CONTRACT EXPERIENCE

- July 2019 – Sept 2019 **CMC of GEORGIA** Toccoa, GA
- Design from scratch new Pushback TUG cab
 - Design consisted of all sheet metal components
 - Made full use of Solidworks multibody sheet metal environment
 - Save Bodies used to link piece parts, assembly, drawings and original multibody part
 - Generated BOM and weldment documentation
- Nov 2018 – July 2019 **ZODIAC AEROSPACE** Alpharetta, GA
- Convert satellite antenna design and documentation from European standards to US standards
 - Modify designs as required
 - Modify fabrication drawings as required
 - Develop part numbering scheme
 - Generate new BOMs and assembly documentation
- Nov 2018 – Feb 2019 **MP EQUIPMENT** Gainesville, GA
- Developed proof-of-concept machine to automate forming processed poultry meat
 - Develop concept layouts
 - Develop details of fabrication, assembly, maintenance, and product change-over
 - Generate prototype fabrication drawings
 - Manage prototype assembly
 - Convert proof-of-concept into production model
- May 2018 – Nov 2018 **CANTRELL** Gainesville, GA
- Created parts manual documentation for poultry processing machines
 - Started with a complex machine that was designed and modeled as a single top assembly
 - The task was to break the top assembly into logical subassemblies
 - Created subassembly models, exploded views, and bills of materials for each new subassembly
 - Prepared documents for insertion into a manual
- May 2018 – July 2018 **KD MANUFACTURING** Suwanee, GA
- Redesigned and documented industrial bush fabrication machine
 - Replaced chain and gear drive system with a shaft and pinion gear system
 - Eliminated lag in system and improved overall accuracy
 - Redesigned weldment support frame to accommodate new drive

Nov 2017– May 2018

SERTA SIMMONS BEDDING

Norcross, GA

- Reversed engineered a semi-automated mattress manufacturing machine
- The machine consisted of a conveyor system that integrated into a larger conveyor system
- The machine also had an automated gluing system with integrated controls
- Hands-on design, purchasing, prototyping, and documentation
- Developed machine certification procedures
- Managed controls development and programing implementation
- Developed training and safety manuals for factory use
- Created design, fabrication, and assembly documentation

2014 Dec– 2017 Nov

DESIGNRESOURCES

Suwanee, GA

- Developed a prototype water play-station for the autistic community
- Developed an EyeGlasslight for the consumer industry
- Designed a flour recovery system for the Bakery industry
- Developed a micro brush dispensary machine for the dental industry
- Designed and objective position system for an automated multi-axis microscope

2014 Sept – 2014 Dec

JBTC / Stork

Gainesville, GA

- Mechanical Designer on food processing tower designs / redesigns
- Designed 40” tall weldment structures
- Designed chain driven conveyor systems
- Created Weldment documentation
- Created Assembly documentations
- Created Assembly BOMs and released BOMs for procurement
- Worked with Product Stream data management software
- Converted design and drawing documentation from AutoCAD to Inventor
- Worked closely with Sales Engineering to generate cost proposals

2008 Dec – 2014 Sept

ViaSat, Inc.

Duluth, GA

- Mechanical Designer for satellite feed systems
- Specialized in designing waveguide systems
- Designed Metal Fabrications
- Designed Weldments
- Designed Sheet Metal parts
- Created Fabrication, Weldment, Sheet Metal, and Assembly Drawings
- Used Geometric Tolerancing
- Generated Bills of Materials
- Engineering Change Orders
- Released Documents for Manufacturing
- Interfaced with Engineering, Purchasing, Shop Personnel, and Vendors

EDUCATION

1985-1986	Caldwell Community College	Hudson, NC
1983-1984	Oglethorpe University	Atlanta, GA
1976-1978	Dekalb Community College	Clarkston, GA

***References available upon request**