

# JONATHAN R. LOVELL

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**CREDENTIALLED ADVANCED MANUFACTURING TECHNOLOGIST**  
**AWARD WINNING ACCREDITED PRECISION TOOL ENGINEERING MACHINIST**  
CURRENT B.S. MECHANICAL ENGINEERING & B.A SUPPLY CHAIN MANAGEMENT STUDENT

*Professional Aerospace and Defense Industrialist with an award winning successful background specializing within Advanced Manufacturing, Engineering Technology, Production/Process Logistics, and Acquired Advanced Machining Contract Tolerance Adherence currently seeking asset candidacy in synonymous or related opportunity.*

- Academic graduate offering years of professional experiences, and national accreditations; in the Precision Machining / Machine Tooling Engineering and Advanced Manufacturing Technology disciplines. Exceptionally established strengths in all facets of industrial production operations, materials, processes, and implementation of best practices in deadline driven; multi-dimensional high precision, technical enterprises. Self-starter and team contributor who always thrives in critical thinking, high capacity roles. Fastidious accomplishment of tasks and/or goals within multi-phase, goal based systems; production and engineering projects.
- Adept speciality with unique critical high demand, "end-to-end," production, and subsequent phases (from design to final production including Q.A. / components exceeding specifics). Adept expertise utilized in applying logical, systematic, and analytical skills to any challenge(s) without faltering confidence, determination, and unmatched focus; always striving to improve cost-benefit ratios without sacrificing quality, nor customer satisfaction. All accomplished by being a continuous proactive problem solver who strategically develops actionable media by factoring data with research methodology to media reports, detailed workflows, protocols, and equipment layout design to determine gentrification possibilities, lean improvement, or inefficiencies/production losses. Also allowing administrative function help prepare adequately through inclusions of "what if," scenarios so clear determination and best course of action can occur; mitigating workplace hazards, inefficacy, and possible unsafe conditions before becoming problematic. **All representing a individual never afraid to go above the call of duty, trustworthy, respectful, and a critical asset; who's character based integrity drives work ethic while striving for attainment of company, team, and personal goals subsequently creating positive environments all around.**

## ADEPT SKILLS & CORE STRENGTHS

- C.A.E ( N.C. / C.N.C / CAM / G.Code) / Office Pro (Excel/Access/SharePoint/Frontline) / Mac OS / Advanced Technology
- Years Utilizing Layout Drafts, Methods, Symbols, etc. (Blueprints, Whiteprints, Multi-view Tolerance Dimensioning)
- Establish, Maintain, & Streamline All Precision Machinery & Adv. Manufacturing Processes, Systems, Technologies
- 3+ Years Quality Control/Assay Assurance w/ Aerospace/Defense Standardization's (IEC/ISO9001, ASME, ANSI, MIL-SPEC)
- Complex Computerized Application's / Controls: ( Data Entry / Analysis / Software / Hardware / Industrial Controls / C.N. )
- Adv. Manufacturing Materials, Methodologies, Equipment: Setup, Operation, Repair, Preventive Maintenance, Q.A.
- Dimension & Inspection of Fabrication (Assure Results Exceed Contract Codes, Stages, Tolerances, Credentials)
- Keen Deftness with Analytically Dependent Problem Resolution w/ Minimum Oversight (Completes any/all tasks possible)
- Constant & Strategic Data Gathering Habit Insures Integrated Precision Performance Assessments (Admin Appraisal Context)
- Applying Newest Industry Specific Innovative Tech (Lean/Additive Mfg, SAP); Reducing Costs / Keeping Ahead of Curve

## ACADEMIC EDUCATION

### Huntsville High School

2007-2010

- 3.8 GPA (Two Diplomas)
- Alabama State Board of Education / Huntsville City Schools Accredited Advanced Academic Diploma with Honors
- Southern Association of Colleges & Schools Diploma of Advanced Technologist w/ Technical Career Endorsements

### Huntsville Center for Technology

2008-2010

- 2 Year Associate Level Honor's Graduate & Certification in Precision Machining & Adv. Manufacturing Technology
- 4.0 GPA with Highest Overall Average within Class Curriculum
- Awarded to NASA CO-OP Machine Tool Engineer Team / NASA H.U.N.C.H. Program
- N.I.M.S. National Certification's & Accreditation's (Each Awarded on 1st Attempt)
- SkillsUSA State 1st Place Wins (NASA S.L.S. Cargo Retrofit / Manufacture Engineering Chapter Display & Design)

### Auburn University

2010-2012

- Mechanical Engineering Curriculum Study
- Sigma Nu Fraternal Association / Philanthropy
- Became American Society of Mechanical Engineers (ASME) Member and Supporter

### **John C. Calhoun College**

**2014-Present**

- Studying Bachelors of Science Programs in Mech./Industrial Engineering and Business Supply Chain Management

## **PROFESSIONAL WORK EXPERIENCE**

### **Huntsville City Schools System**

**2006-2008**

**Theatrical Technical Director** (Audio/Video, SFX, Rigging, Safety, Controls, Production Equipment)

- Responsible for Venue Control / Equipment Inventory & Utilization (\$650K+ Tech Asset Inventory Supervised)
  - Performed all technical operations, installations, adjustments, necessary maintenance, constructions, assurance of safety precautions or procedures, code adherence of the technical operations, systems, and assets used in the performance and entertainment industry.
- Equipment operated and maintained: microphones, projectors, various speakers, video monitors, video screens, A/V recording equipment, media formatting, multi-channel interfaced digital communication systems, sound/audio channel mixing boards, editing consoles or software, wireless transceivers, traditional and intelligent or automated lighting (Tungsten-Halogen, MSR, Xenon, LED, HID, High Pressure Sodium, Metal-Halide/HMI, etc), AC/DC electrical (transformers, ballasts, dimmers, fixtures, cables, channel circuiting, patching, motors, winches, breakers/grounding devices, surge prevention, PLC's etc.), climbing/rigging equipment (including use of trusses, loading and balancing methods, rope fly systems, weight ballasts), complex pulleys, fly system controls (set pieces, equipment, persons, etc; under wire control for production change / special effects cues).

### **Huntsville Country Club**

**2006-2009**

**Electro-Mechanical Fleet Equipment Manager**

- Operated, maintained, and safeguarded the technical assets of H.C.C.'s operation equipment, tools, and vehicles.
  - Managed 38+ (50-Volt, 8-Battery) Electric DC Motor Vehicles, 12 Gas/Diesel Workhorse Hydraulic Dump-Bed Utility Vehicles, 6 Industrial Specialty Mowers, 3 (65 Gallon) Fertilizer Pump Spray Arm Vehicles, 10+ Fleet of Diesel Toro ZeroTurn Mowers, Numerous Industrial Small Engines/Pumps/Blowers/Bush-hog's etc; and the storage, charging, maintenance, chemical staging facilities.

### **NASA (MSFC) [H.U.N.C.H] / Industrial Fab Inc.**

**2008-2010**

**Adv. Manufacturing Analyst & Precision Machine Tool Engineering Technologist** (Materials/Processes/Q.C.)

Responsible for High Tolerance Production Orders Involving Broad Facets of Multi-Phase Advanced Aerospace Manufacturing and Production Controls.

(Using Adept Skills in Precision CNC's, Mills, Lathes, and other Production Engineering Systems as well as Diverse Abilities in Design, Testing, Gentrification, etc.)

All Components & Hardware directly for NASA Space Based Systems, ISS Program, & ISS Training Facilities

Setup All Machinery and Inspect All Machinist Parts for Quality Control Assurance After Completing Initial Design and/or Prototyping.

- Handled all Technician Duties, Mechanical Needs, and All Crucial Documentation
- Full "end-to-end" production of high tolerance aerospace components to assure in-house availability of mission task support components and Space Based System hardware dedicated to properly sustain existing assets and/or integrate technological advancements to the ISS, ISS Crew Training Facilities, and other NASA Space Based Systems.
- Overview, implemented, and then adapted effective advanced manufacturing principals, techniques, hardware, and materials. Such as lean engineering practices, which are fundamental in developing the new standards in NASA's contract acquired precision hardware creation to continue critical advances and meet agency reform goals implemented to protect the sustainability in guaranteed domestic dominance and uninfluenced space access.
  - Also subsequent production of equipment critical to life-cycle fulfillment of current space based assets.
- Considerable involvement with operations centered around manufacturing of rare metals and alloys; including processes using "smart materials" and prototypes such as SMA's (shape memory alloys).
- Thorough and constant system analysis, research and design manufacture practice, research methodology, and frequent determination of cost effective advancement in precision process requirements via frequent

mental technical analysis and ability to design technique practices.

### **OTHER ADEPT PROFESSIONAL & ACADEMIC SKILLS**

- Intricate manufacturing production through implementation of advanced manufacturing processes including conducting process analysis, applying knowledge of product design, fabrication, assembly, tooling, materials, etc.
- Continuous application of key lean manufacturing principles and tech to production stages.
- Analyzes and plans workflow, requirements, and equipment layout to improve manufacturing efficiency.
- Manages the overall implementations of capital equipment projects.
- Assures product and process quality by testing finished product and process capabilities to validate manufacturing process requirements.
- Design and prepare concept drawings of new equipment or modifications to existing equipment.
- Develops tooling and fixtures for new products and processes needed per design.
- Identify and create solutions for issues in safety, quality, productivity, and cost reduction, Manufacturing, Engineering Technology, Production Logistics, and Acquired Advanced Machining Contract Tolerance Adherence.

*Various skills and experiences which I have more than three years of professional application; but not limited to:*

***Constant Adherence to ANY/ALL (Local, State, Federal, Company, DoD, Contract, Agency, OSHA, Hazmat, etc.) Regulations, Ordinances, Laws, Codes, Standards, etc.***

- Micrometers / Calipers / Height & Depth Gauges / CMM Devices / Jigs / (All Precision Assay Methodologies)  
-Extensive (digital & analog) equipment & methodologies directly in production uses & Q.C./Q.A. duties)
- Automated, N.C.'ed , Manual, Horizontal & Vertical Grinders / Surfacers of Varying Uses, Surfacing, & Styles
- Expert Reading, Altering, Dimensioning / Tolerance Control & Creation of All Technical Blueprints or Drafts
- Precise Calibration, Assembly, Preemptive Maintaining, Formatting, Emergency Repairs, etc of all equipment.
- Vertical / Horizontal Bandsaws of all cutting design, usage, formats, manufactures, facets of cutting blades, etc
- Large and Small Sanders varying from typical surface belts to specialized material and surface dependents.
- Metal Shears, Push Brake Equipment, Other Sheet Type Metal Formatting Equipment
- Heat-Treating, Auto-Clave, Chemical / Electrolysis, Application of MIL-SPEC / Proprieties to Parts or Stock
- Hydraulic Presses & Custom fluid-dynamic powered machine set-up, application, and operations
- All Hand / Pneumatic Tools / Tooling
- Maintaing All Equipment Including personally Mixing All Coolants, Applying Oil(s), Cutting / Tapping Fluids...
- Machining Own Tools, Jigs, Custom Braces, etc.
- Complete Textbook and Mathematical / Thermodynamical Theoretical Knowledge
- GPS / GIS equipment use
- 12+ Years in Advanced Computer Hardware, Software, Programming, Trouble Analysis/Repair, etc. Experience
- Heavy Equipment Operation, Maintenance, Repair, & full Electro-Mechanical / Mechatronics Knowledge
- Large Vehicle and Trailer Operation / Experience
- All Industrial / Manufacturing Equipment Preemptive Maintenance
- Mechanical & Electrical Equipment Unscheduled Repairs / Quick Troubleshooting
- Many Years Involved w/ 250-12,000+LBS Rigging and Climbing Equipment Set-Up / Use
- Extensive Electrical Code & Wiring Experience
- Pneumatic Equipment Use, Maintenance, and Troubleshooting
  - High Pressure Fluid Dynamics Education and Training
  - Complete Hydraulic Systems Technician Abilities and System Set-Up / Overhaul

***Many B.S. College Level Classes Taken*** -several examples:

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| - All Required Histories                       | - Computer Related Classes (i.e.: MatLab, CAD/CAM/CAE, etc)   |
| - All Required English / Writing / Literatures | - Business Law / Contract Law   |
| - Calculus                                     | - Accounting  |
| - Political Economics                          | - Ethics / Philosophy   |
| - Industrial / System Engineering              | - Engineering Environment Science   |
| - Advanced Manufacturing Processes             | - Integrated Calculus Based Physics w/ Required Lab / Extra<br>Applied Mechanics for Engineers & Scientists Lab |