

# Ryn Shuster

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(928) 710-6096

Flagstaff Arizona

## Education

- Bachelors of Science, Mechanical Engineering, Northern Arizona University, May 2022
- Associates of Science, Coconino Community College, 2019
- Machining and Manufacturing Technology Certification, Yavapai

## Manufacturing Skills

- Have run and setup a variety of machines and controls:
  - Haas (Mill and Lathe)
  - Fanuc (Mill and Lathe)
  - Matsura (Mill)
  - Okuma (Mill and Lathe)
  - Milltronics (Mill)
- Can program 3 axis mills and 2 axis lathes in several CAM softwares
  - (Proficiency listed in order from most proficient to least)
    - GibbsCAM
    - Fusion 360
    - FeatureCAM
- Level 1 Certification in PC-DMIS, Automated CMM Programming
  - Developed more advanced quality control processes at previous employer to reduce scrap and increase traceability through the use of first article forms.
- Familiarity with forms of post processing and non-milling and turning applications such as
  - Grinding (Tight tolerance flatness and finish)
  - Heat Treatment
  - Surface Treatment
  - General Debur and Finish processes

## Experience

### LAB ASSISTANT, DYNAMIC ACTIVE SYSTEMS LAB, NORTHERN ARIZONA UNIVERSITY, FLAGSTAFF, AZ — OCT 19 - PRESENT

My work was focused on designing hardware for additive manufacturing using a Markforged Mark II 3D printer. I had to become familiar with Solidworks and working within pre existing parts in order to modify them to better serve their design purpose or to design new parts that interacted with them in an overall assembly. When other research labs needed to utilize the printer in the lab it was my job to assist them in making sure their parts could be feasibly produced in an additive format and help modify them for better performance if they couldn't.

-Dr. Michael Shafer (928) 556-3109

### MACHINIST II, MACHINE SOLUTIONS INC, FLAGSTAFF, AZ — JAN 16 - OCT 19

My day to day duties included me potentially programming (using GibbsCAM for the mills/lathe or PCDMIS for the CMM), setting up, and running parts on any one of 5 different mills, (standard as well as large gantry mills), CNC Lathe, surface grinders, or our automated CMM. Tolerancing could range from +/- 0.010" to +/-0.0002" on features for any given part. Since it's a prototype shop I could be running half a dozen different parts in a shift with vastly different setups, tools, and fixturing.

- Melissa Talboom (928) 523-8696

### MACHINIST, HAWKEYE PRECISION, PHOENIX, AZ — JUL 15 - FEB 16

I was expected to be able to independently run and maintain a machining process to produce high quality parts to the specification provided by our customers. This meant constantly monitoring variables in order to predict tool adjustments and replacements to best achieve desired tolerances while minimizing potential down time during setup and production. I was responsible for all at machine inspections

- Isaac Turner (937) 474-1508

### MACHINIST APPRENTICE, KLK MACHINING INC, PHOENIX, AZ — FEB 15-JUL 15

As an apprentice I was expected learn to take a program, tool list, and fixturing, and setup and run parts to print. This could require any number of skills, including but not limited to, manually setting tools to a preset touch off bar, swinging holes (3 or 4 points) to pick up X0 Y0 or doing it using an edge finder. I had to check tool runout in order to produce the most accurate parts possible. It was a multi faceted job requiring me to learn fast and think quickly in order to solve problems in an efficient manner. Most of the parts I ran required individual sub-setups and offset management on a per part basis.

- Dave Huard - Supervisor - (602) 267-1331

## Skills (cont.)

- Experience with additive manufacturing with high end materials.
  - MarkForged Mark II
    - Designed parts to remove fasteners (Flexures and Detents)
    - Designed parts for thermoset fastener inserts.
  - Had to make adjustments based on multi-discipline team feedback for better component and assembly function.
  - Adjusted customer parts based on printability and part capability for customer needs
  - Assisted in printer set up and training for multiple departments
- Generally Manufacturing Knowledge
  - GD&T
  - Machinist level familiarity with ISO/ASO 9000/9001
  - Lean Manufacturing and Process Efficiency
  - Process flow in machine shop environments

## Experience (cont.)

### **MACHINIST, SAPPHIRE SCIENTIFIC, PRESCOTT, AZ — 2014-2015**

Sapphire Scientific makes industrial grade water removal systems for flood damage, my job was to put featuring (pockets, holes, threaded holes) on the frames prior to them being welded together. I ran a combination of a Shizuoka Mill with a Bandit control, and a Haas Mill. I also cut my own stock using a table saw and a band saw. The Bandit sometimes required me to write my own programs/choose tooling in order to do custom parts.

- Richard Loftin - Supervisor - (928) 445-3030

### **MILL OPERATOR/DEBUR TECH, YAMPA PRECISION, PRESCOTT VALLEY, AZ — 2013-2014**

I started as a debur technician, bead blasting and working with parts to remove sharp edges and excess material from parts prior to being shipped for further processing or to the customer. As I gained experience I was moved to operate a mill. Using a mic, calipers, indicator, comparator, etc. was crucial to producing good parts, as well of course reading complex blue prints. I had to set tools, replaces tools, and choose appropriate tooling for the job at hand. I ran an assortment of machines including YCM, Matsura, Fanuc, and Hitachi Seiki.

- Mike Hanley - Supervisor - (928) 899-192



