GABRIEL CABRERA

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EXPERIENCE

Adecco under contract to GE Aviation, McAllen, TX
January 2019 - May 2019

Lean Engineering Assistant

- Implemented Lean Manufacturing principles throughout the workplace
- Performed time studies on turbine blade repair and inspection processes
- Used AutoCAD to create plans for relocation of machinery

EDUCATION

Bachelor of Science in Mechanical Engineering
August 2018

The University of Texas at Austin, Austin, TX

PROJECTS

Application of 5S with Shadow Boards
Fall 2019

GE Aviation Lean Manufacturing Project

- Cut shadow boards for various types of fixtures for turbine blades and nozzles
- Installed a shadow board for tools in a tooling cabinet

Torque Measuring System for Turbine Shaft Coupling
Summer 2019

Final Engineering Design Project

- Designed a torque measuring system for a shaft coupling attached to a gas turbine
- Diagrammed a system which used an optical measurement technique and binary encodings to calculate torque

Thermodynamic Model of Gas Turbine
Spring 2018

Thermal Fluid Systems Group Project

- Programmed a segment of a thermodynamic MATLAB model for a gas turbine
- Used thermodynamic principles to calculate performance parameters of a gas turbine

Machined Vise
Fall 2017

Machine Elements Semester Project

- Machined a handheld vise with mill and lathe machine tools
- Used a fly cutter, various endmills, probes, and a grinded lathe cutting tool
- Programmed tool paths for a CNC

Unreal Engine Game
March 2020 - June 2020

Personal Game Development Project

- Developed and published a puzzle platforming game for the Android platform (BBM - Balls Blocks & Mazes)
- Used Unreal Engine, Blender, and Visual Studio Community to develop a 3D puzzle game

SKILLS

Experience
3D Parametric and Mesh Modeling, Machining, 3D Printing, Contact and Hot Air Soldering, Multimeter and Oscilloscope, Game Development

Programs
Solidworks, Autodesk Fusion 360, AutoCAD, MATLAB, Arena Simulation Software, Visual Studio Community, Microsoft Office Suite, FreeCAD, KiCAD, LabVIEW, Solidworks MasterCAM plug-in

Programming Languages
C/C++, C#, Python, Java

Languages
English (native speaker), Spanish (intermediate)

ADDITIONAL COURSEWORK
Intermediate Heat Transfer, Thermal-Fluid Systems, Machine Tool Operation for Engineers, Simulation Modeling, Combustion Engine Processes, Intro to Mechatronics I, Introduction to Number Theory