Kevin Aguilera kevin.aguiler21@gmail.com / 717-805-1945

EDUCATION

The Pennsylvania State University, Harrisburg Campus Expected Aug 2020
Bachelor of Science in Mechanical Engineering, Minor: Mechatronics

Study Abroad
Technische Hochschule Ingolstadt, Germany May 2016 - June 2017
Bachelor of Mechanical Engineering, Automotive Engineering

ENGINEERING EXPERIENCE

Engineering Lab Assistant, Penn State University, Harrisburg Jan 2019 – April 2020

- Supervised proper usage of the Engineering 3D printers while making design suggestions for optimal, strong print to students and professors.
- Refurbished and troubleshoot a donated Magtrol Hysteresis Dynamometer for class laboratory application.
- Improved and manufactured a vibration test bench for analyzing stress concentration in induced slit carbon steel rods.
- Unpacked and installed a hydraulic training module to be used in an engineering class.

LEADERSHIP EXPERIENCE

Formula SAE Penn State University, Harrisburg

Chief engineer June 2019 - May 2020

- Prepared a SolidWorks 3D file of the car with more than 1000 components and 20+ subassemblies.
- Organized sub teams' responsibilities to meet deadlines for competition using engineering design cycle and team management tools.
- Made engineering suggestions to sub teams designs along with material selection and feasibility of manufacturing.
- Handled a team of 35 active members along team captain and chief of operations.
- Introduced to the team testing & validation to obtain a higher place at the annual competition.
- Handled vehicle dynamic simulations using commercial software in order to approve or suggest design changes.

Manufacturing Team Lead August 2018 - June 2019

- Prepared blueprints for each component to check feasibility of manufacturing, tolerances, tool selection and workholding.
- Prepared and executed G-Code for milling and turning components with CAM software.
- Manufactured components out of 7000 and 6000 series Aluminum, & 4000 series steel alloy.
- Prepared manufacturing reports for each part made in CNC machines keeping track of material removed and number of operations.
- Fabricated simple components with manual milling and turning machines.

PROFICIENCIES

Languages	Spanish (Native) / English (Fluent) / German (Basic)	
Software	Design:	SolidWorks, CATIA V5, EagleCAD
	Analysis:	ANSYS, Matlab/Simulink
	Microsoft:	Teams, SharePoint, Office
	Programming:	C++, Matlab
Physical	Mechanical wrenching / Fabrication / CNC Milling & turning	