For Plane pictures and videos:

One of my earliest memories is my dad taking me to an airshow where people would fly their radio-controlled planes. Ever since then I have had a passion for flight. When we moved to the US, my parents couldn’t afford support my hobby. However, I discovered a youth program where we could build broken down model airplanes and learn to fly them for free. Here are some videos and pictures I could scavenge including the maiden flight for one of my airplanes.

3D printing:

In college we had access to a variety of 3D printers. For a class project we had to choose a mechanical object to hypothetically mass manufacture as well as 3D print it. I decided on a radial engine as I could show the moving pistons with it. On the images you can see what the CAD model looked like versus what the 3D print turned out like. There is no video but if the crankshaft was rotated all of the six pistons would move as expected.

Autonomous project:

My favorite project in college was building and programming an autonomous robot. The goal of the project was to navigate through a randomized maze and then be able to park in a designated parking spot. The robot was controlled by an Arduino chip connected to an array of sensors. On the pictures you can see the finished robot in all its glory. Unfortunately, I don’t have a video of the finished robot navigating the maze but I do have a short clip of a troubleshooting test run.

The Inception Group

During my time I worked on a variety of different projects. The main project I worked on was developing a testing fixture to test for the durability of a hinge that supports an LCD panel. The testing fixture was powered by an electrical motor connected to belt chain. Unfortunately, I don’t have a video or picture of the finished product but on the pictures attached you can see the progression halfway through its creation.

Power point:

This is an example from one of our generic courses used to onboard new employees. It shows both theory and step by step examples of the quality of work I produced using PowerPoint.

Block video:

I have been teaching a MBSE course focusing on the Systems Modeling Language (SysML) for almost three years to one of our customers. Since MBSE is growing in demand, I created set of short videos to briefly introduce the nine SysML diagrams to my colleagues so they would have a conversational level of knowledge. This video is about the Block Definition Diagram.

Storyline:

This is a screen recording of a small section from one of the Storyline files I created. This is focusing on the Activity Diagram which is one of the nine System Modeling Language diagrams. In the video you can see the use of triggers, animations as well as videos taken directly from the software used. Some pictures have been blurred out.