



**NATHAN HOLYOAK**

**DESIGN MANAGER**

**NORTHROP GRUMMAN CORPORATION**

Nathan Holyoak is a Design Manager currently working for Northrop Grumman Corporation in the solid rocket motor division. Nathan holds a B.S. and M.S. in Mechanical Engineering as well as an MBA. He has over a decade experience in process and product lifecycle management. He and his team began leveraging CAD solid models to improve design efficiencies and reduce product defects.

Nathan began early explorations of using CAD solid models in virtual reality. With the invention of head mounted displays (HMD's) Nathan and his team quickly saw the engineering opportunities. He has tested and implemented an engineered VR system that has been used very successfully throughout his division.