

A FUTURE WITH 3D ENGINEERING AND AUGMENTED REALITY

Steven LaPha Jr.

CAD/PLM Administrator NASA Kennedy Space Center – Engineering Service Contract

June 6-9, 2016

liveworx.com





PREFACE

- The information in these slides is intended to be conceptual and doesn't necessarily represent technology as it exists today
- The content doesn't necessarily represent any specific tools, software, or projects unless otherwise specified
- Ideas expressed here are my own and do not necessarily represent the views of my company, contract, or contracting company





WHY?

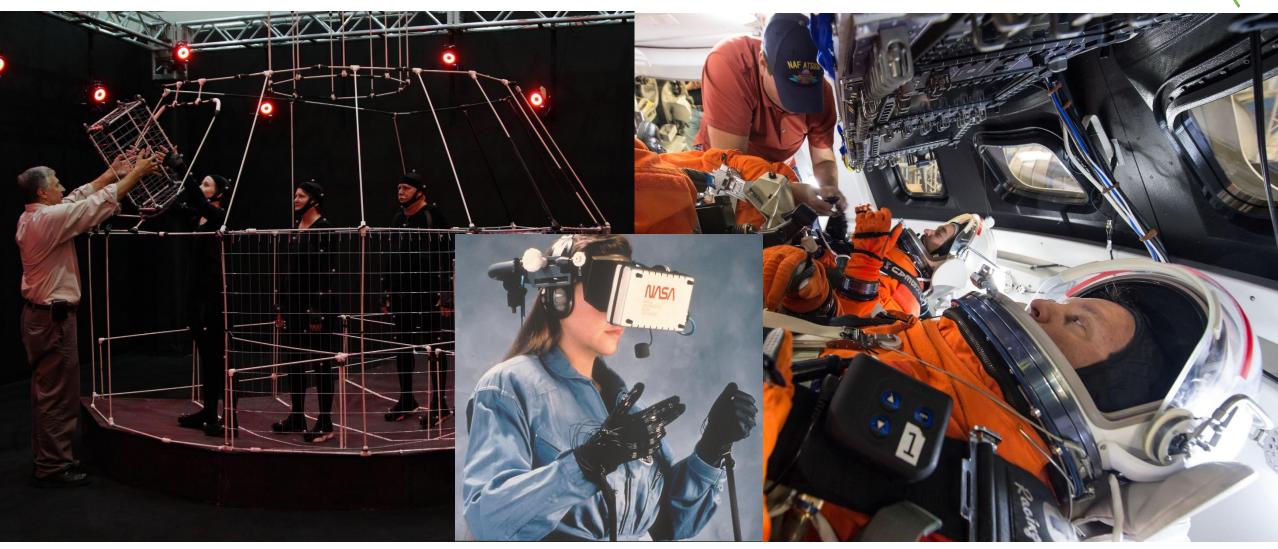
ENGINEERING OF YESTERDAY





EXPERIENCE





THE BENEFIT OF AUGMENTED REALITY







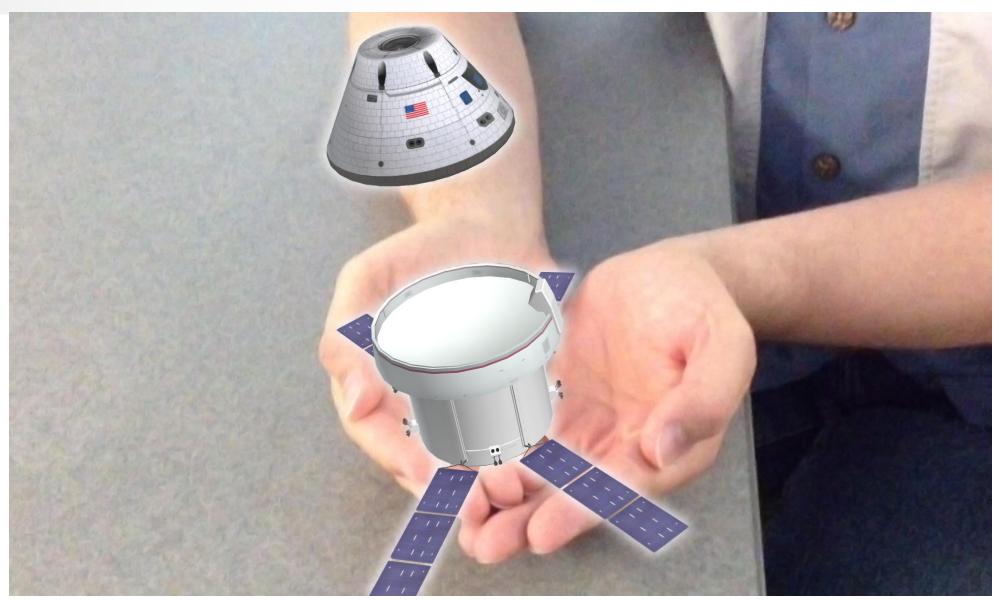
CURRENT CAPABILITIES OF AUGMENTED REALITY





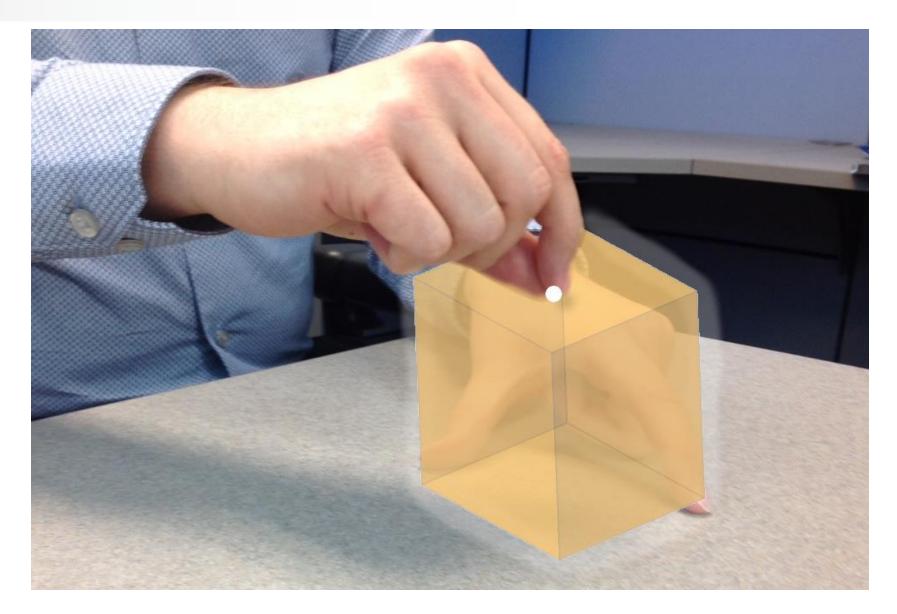
VISUALIZE





CONCEPTUAL DESIGN





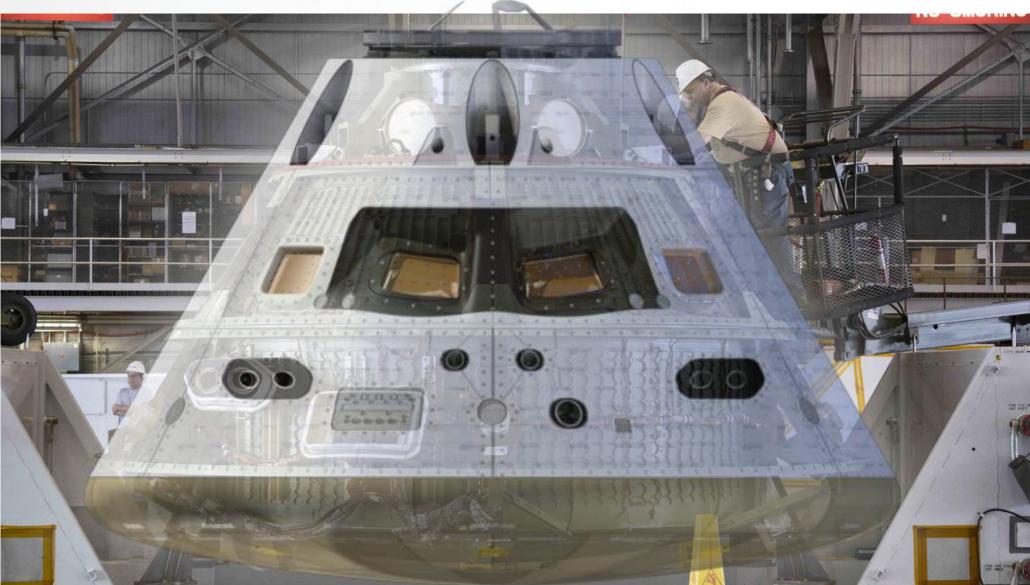
USER EXPERIENCE





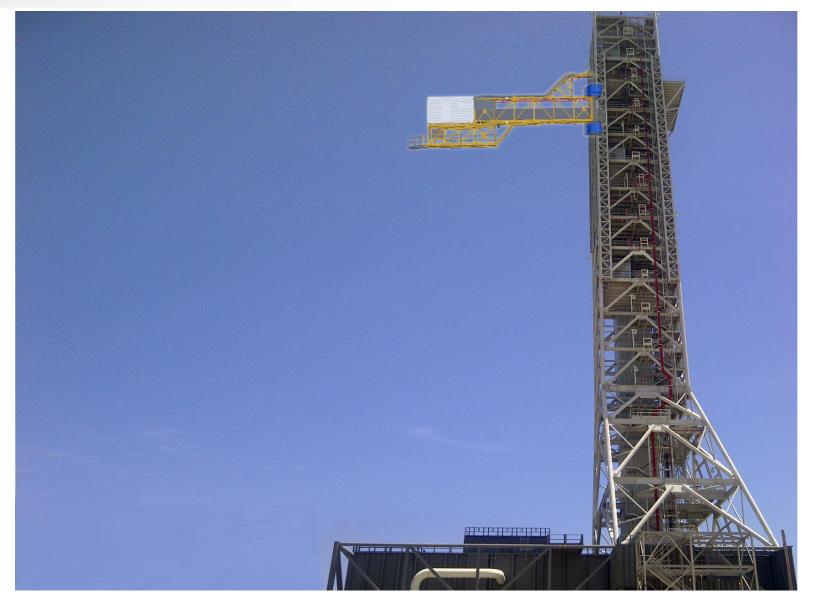
OBJECT RECOGNITION





ADVANCED DESIGN





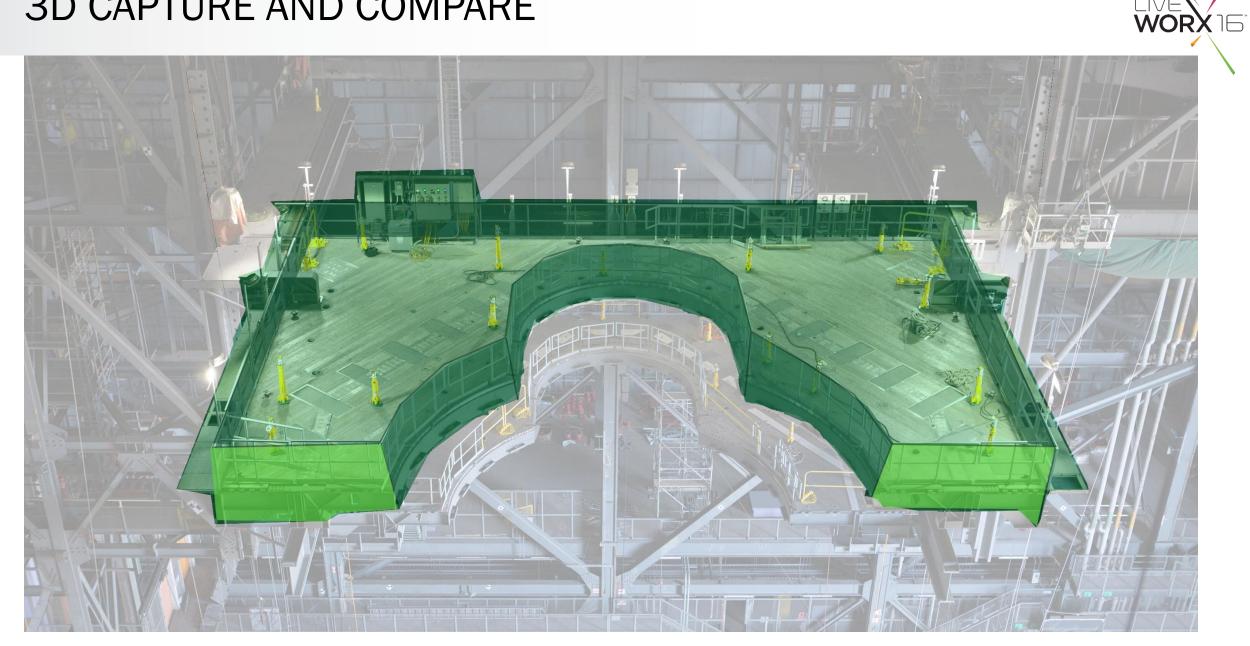


REMOTE ENGINEERING



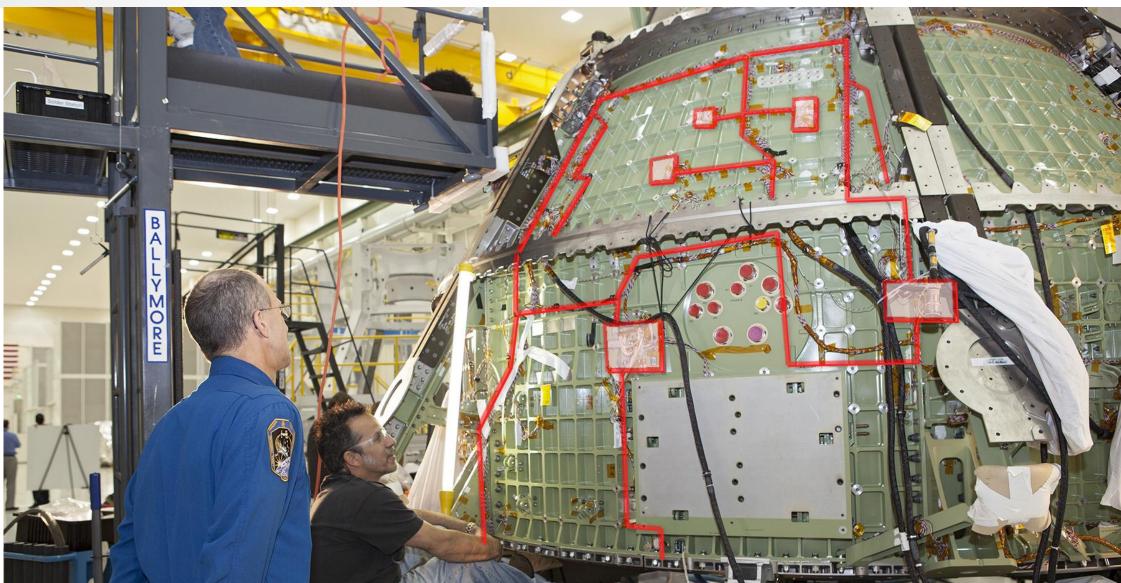


3D CAPTURE AND COMPARE



2D TO 3D COMPARISON







EXISTING PROJECTS PAVING THE WAY AHEAD

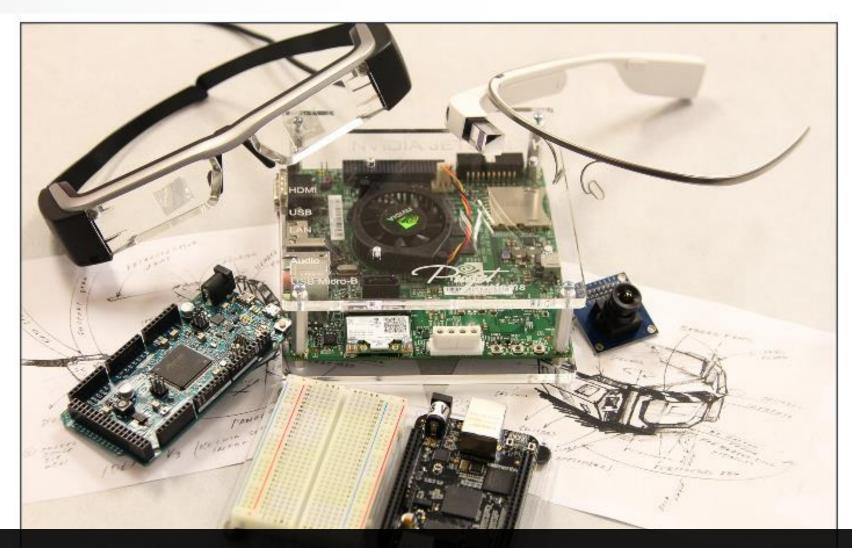
PROJECT SIDEKICK





INNOVATIVE DISPLAY AND ENVIRONMENTAL AWARENESS SYSTEM (IDEAS)

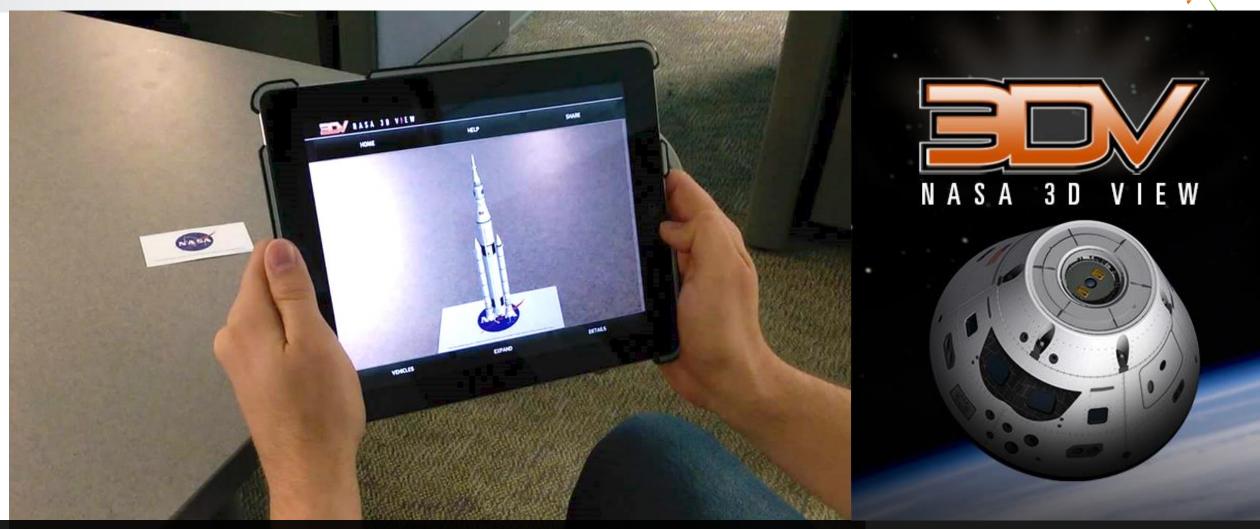




http://www.nasa.gov/content/ideas-to-enhance-operations-on-earth-and-in-space

3D VIEW APP





http://www.nasa.gov/externalflash/3DV/

CHALLENGE



Seek use cases

Push for improvement

Start exploring

• If it doesn't exist, make it exist

