Beta Presentation
SmartSat™ Heterogeneous Computing in Space

The Capstone Experience
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Project Overview

• Enable data to be processed faster by distributing algorithms across dissimilar and workload optimized processing devices.
• Minimize processing delays by determining which hardware component to use based on status of the satellite and resource utilization.
• Reduce hardware knowledge required to develop with XRT
System Architecture
Accelerator Manager
XRT Loader Library
Visioncpp Accelerator
Vitis Vision Accelerator
What’s left to do?

- **Features**
- **Stretch Goals**
  - XRT Monitor
  - Aesthetically pleasing GUI
  - Priority/Preferred device Shuffle
- **Other Tasks**
  - Optimize code
  - Make XRT library output more descriptive
Questions?