Beta Presentation
SmartSat™ Software Development Kit & AI Platform

The Capstone Experience
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Project Overview

• SmartSat™ is an LMS software architecture that allows reprogramming satellites in orbit
• Our SDK Manager allows easy management of the installation of multiple SDKs
• View all relevant information about available SDKs
• Enabling hardware-accelerated inferencing on new low-power GPU architecture
System Architecture

The diagram illustrates the system architecture with a front end and a back end. The front end includes a GUI and a CLI, which interact with the controller. The back end is represented by Flask and MySQL. The user interacts with the front end.
System Architecture
SDK Manager – Published SDKs
SDK Manager – Create SDK
SDK Manager – User Preferences
Accelerated Inferencing in Container
What’s left to do?

• Features

• Stretch Goals
  ▪ Automatic system dependency resolution
  ▪ Continue attempting to build ONNX Runtime with ROCm execution provider

• Other Tasks
  ▪ Refine command line outputs
  ▪ Deploy modified inference engine as SmartSat app
Questions?