MICHIGAN STATE
U N I V E R S I T Y

Beta Presentation
SmartSat™ Software Development Kit & AI Platform

The Capstone Experience

Team Lockheed Martin Space

Robert Francis

Jackson Haugen

Tyler Holt

Kurt LaBlanc

Maxwell Lu

Kyle Soderlund

Department of Computer Science and Engineering
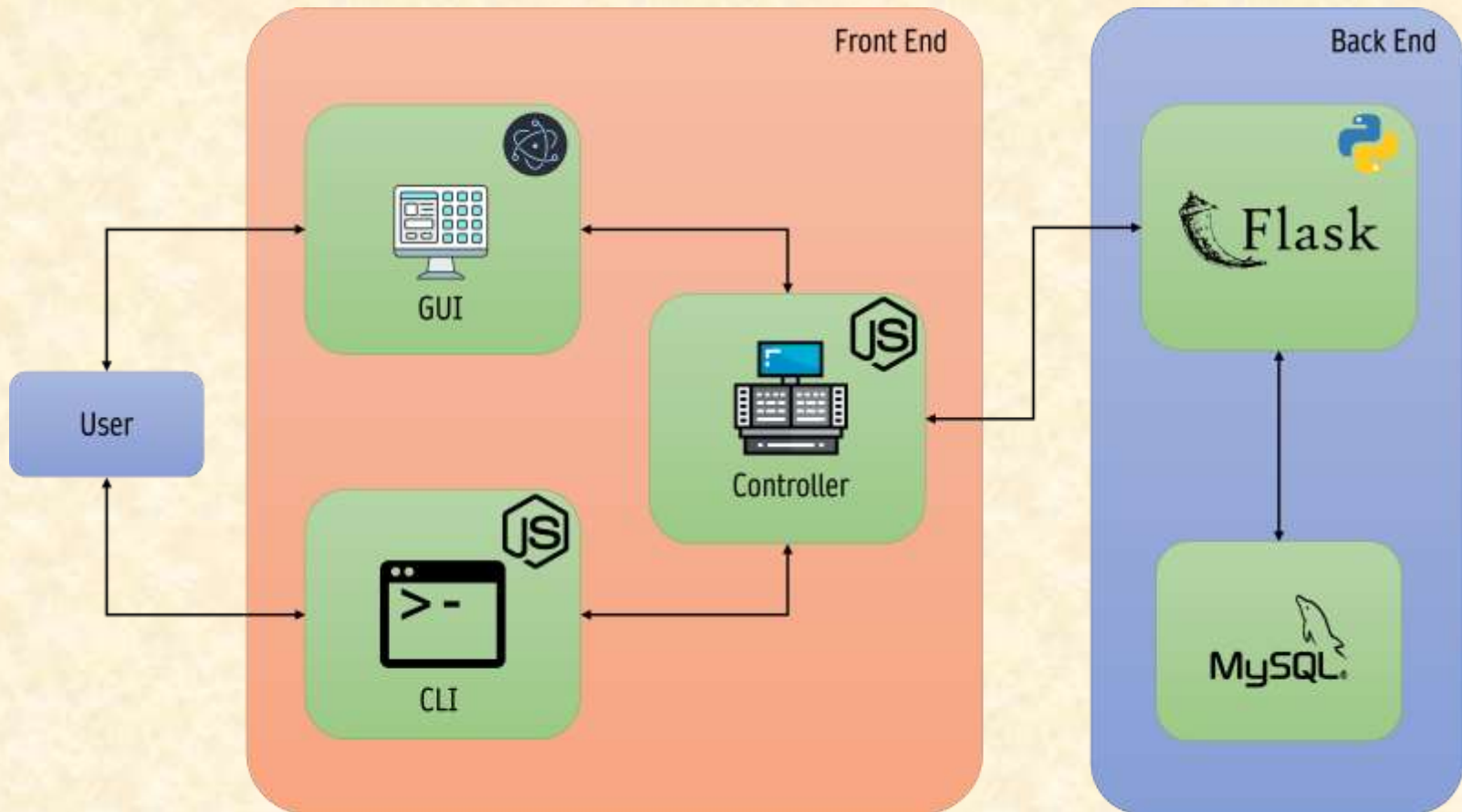
Michigan State University

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From Students…
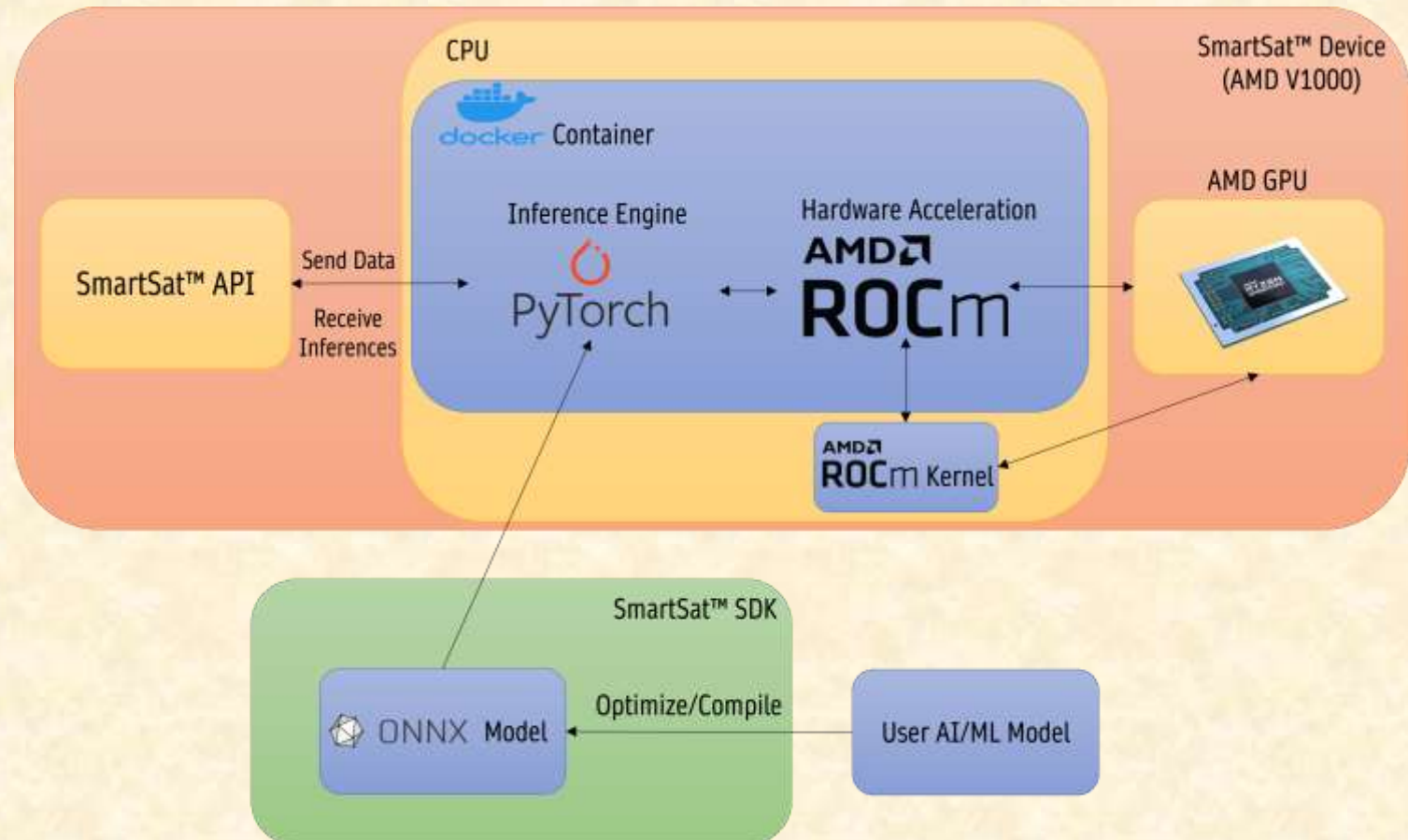*…to Professionals*

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

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?

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