Project Overview

• To enhance the existing SmartSat App Store by adding performance metrics and dependency tracking features which will be displayed to users.
  ▪ To ensure an application is viable for a given satellite system our solution includes performance metrics for CPU and Memory usage
  ▪ Applications may have many dependencies which our solution will automatically track and deploy to satellite systems
System Architecture
Performance Metrics: Application Performance

![Performance Metrics Image]

**Storage Utilization:** 751.19MB

<table>
<thead>
<tr>
<th>Component</th>
<th>Value (Average)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPU</td>
<td>18.65 %</td>
</tr>
<tr>
<td>Memory</td>
<td>537.85 MB</td>
</tr>
</tbody>
</table>

**Time Series Data**

- **CPU:**
- **Memory:**

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The Capstone Experience

Team Lockheed Martin Space Alpha Presentation
Performance Metrics: Testbed Instance Metrics
Dependencies: Listed Dependencies
Dependencies: Checking Dependencies on Hardware

The Capstone Experience
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What’s left to do?

- Front & back-end integration for performance metrics
- Repair Codebase by replacing hard-coded values for dynamic variables
- Deploy dependencies to hardware
Questions?