From Students…
…to Professionals

MICHIGAN STATE UNIVERSITY

Beta Presentation
Change Insights Datamart and Risk Assessment
The Capstone Experience

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Project Overview

• Identify production risks during development
• Consolidate data from multiple systems into comprehensive DataMart
• Develop a model that assesses risk associated with each software change
System Architecture

The diagram illustrates the system architecture with the following components:

**Source Services**
- Jira Software
- Bitbucket
- Octopus Deploy
- harness
- servicenow

**API Layer**
- API

**Data Layer**
- SQL

**Back-End**
- Azure Machine Learning
  - Model Development

**Front-End**
- Power BI
Home Page
Incident Tracker Dashboard
Risk Factor Analysis
Model Performance Compare
Model Inputs and Outputs
Random Forest Overview
What’s left to do?

• Stretch Goals
  • Live notifications (security)
  • Team related Information
• Other Tasks
  • Clean up Power BI
  • Improve model further
Questions?