MICHIGAN STATE UNIVERSITY

Alpha Presentation

Setup Assistant for MLX Mac Cluster

The Capstone Experience

Team Apple

Anika Balakrishnan
Constance Chen
Marco de Oliveira Batista
Paul Lin
Amelia Marine
Madhur Varshney

Department of Computer Science and Engineering
Michigan State University

Spring 2026

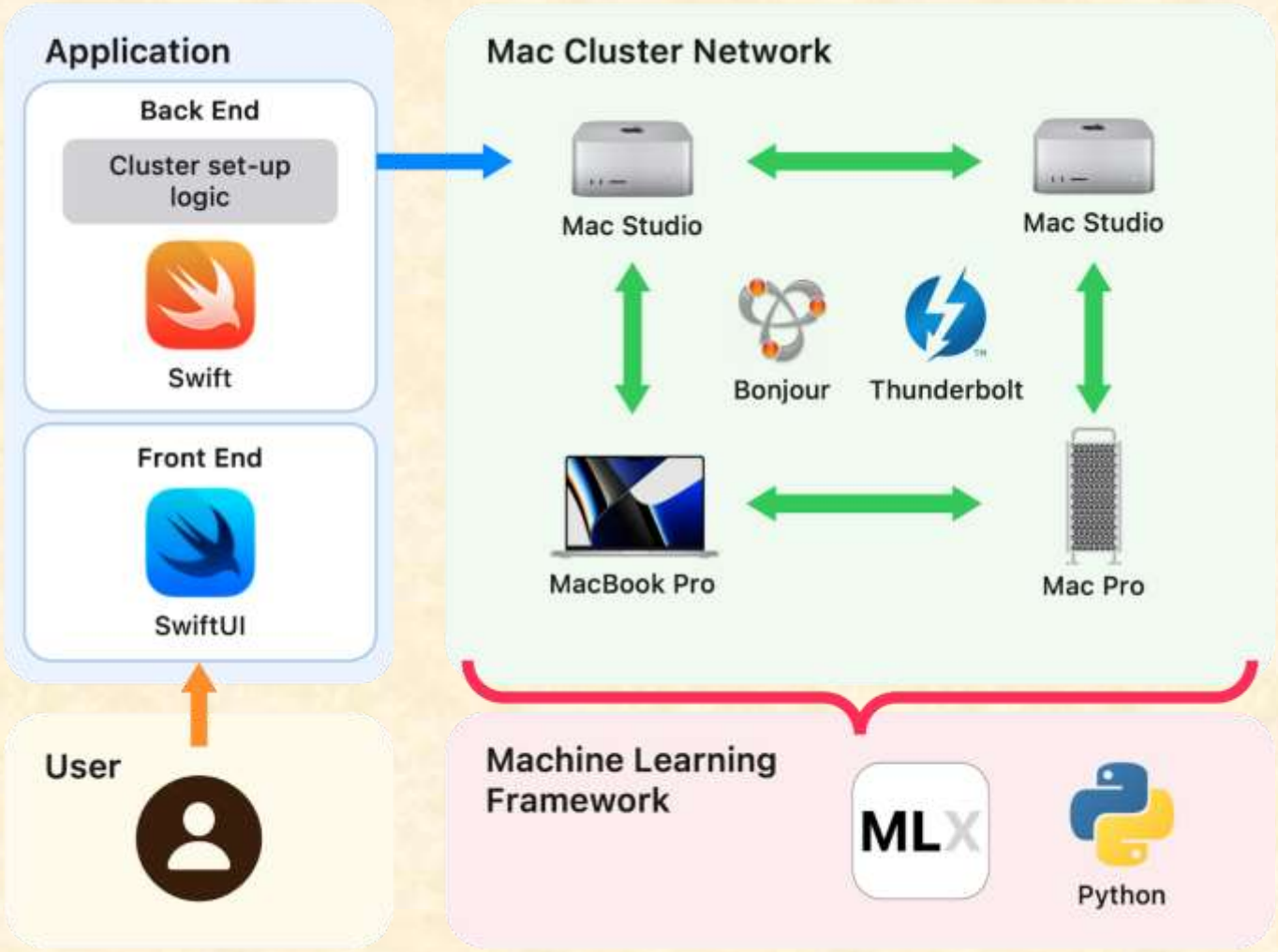


From Students…
…to Professionals

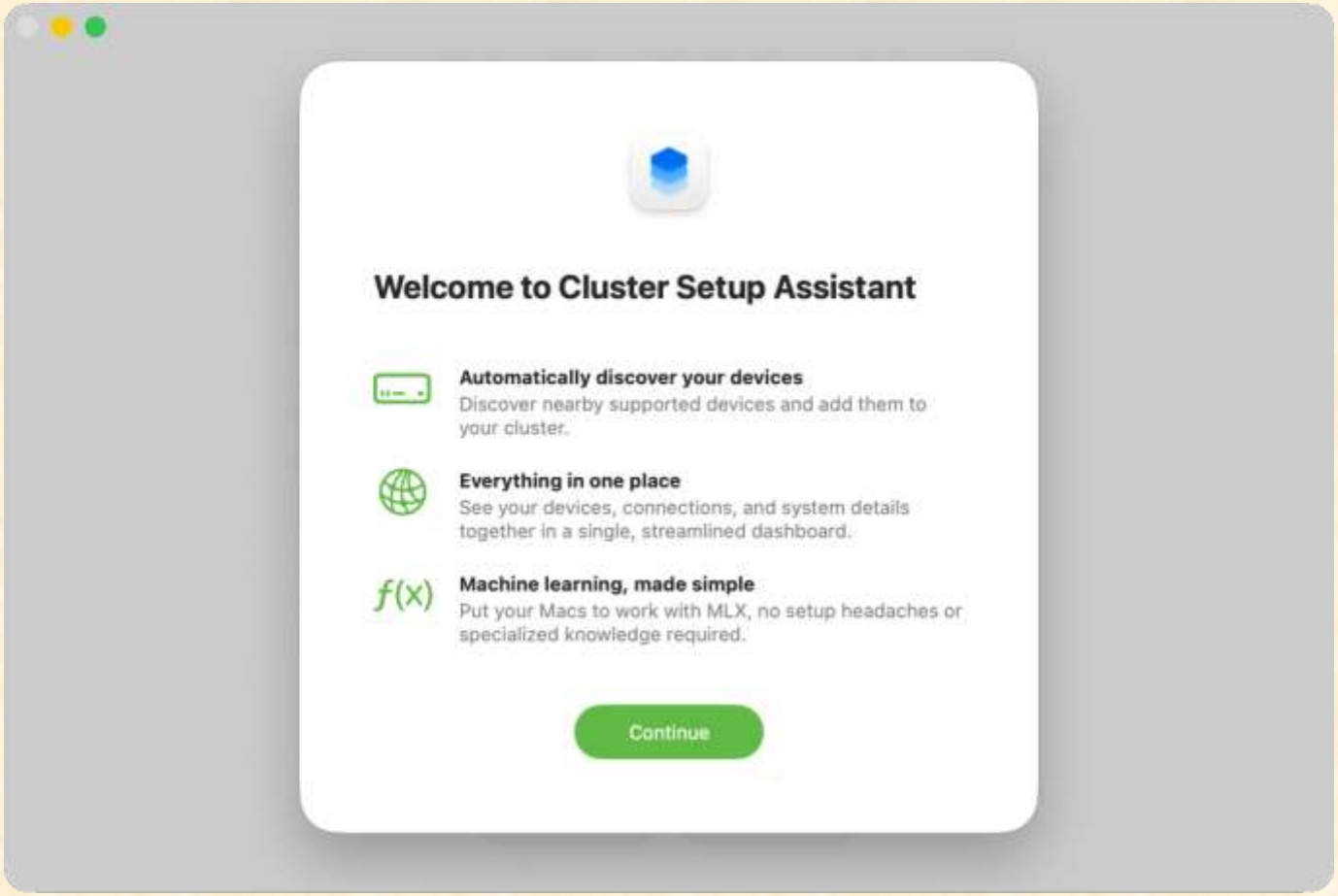
Project Overview

- **Problem**: Current MLX setup requires manual SSH configuration and offers minimal debugging feedback, which makes MLX inaccessible to non-experts
- **Our Solution – MLX Setup Assistant:**
  - Automated Device Discovery – Users click a button to add nearby Macs instead of manual SSH setup
  - Real-Time Status Monitoring – Clear visibility of all devices and progress throughout setup
  - Intelligent Error Handling – Detects issues, walks users through issue resolution, and returns to workflow seamlessly

System Architecture



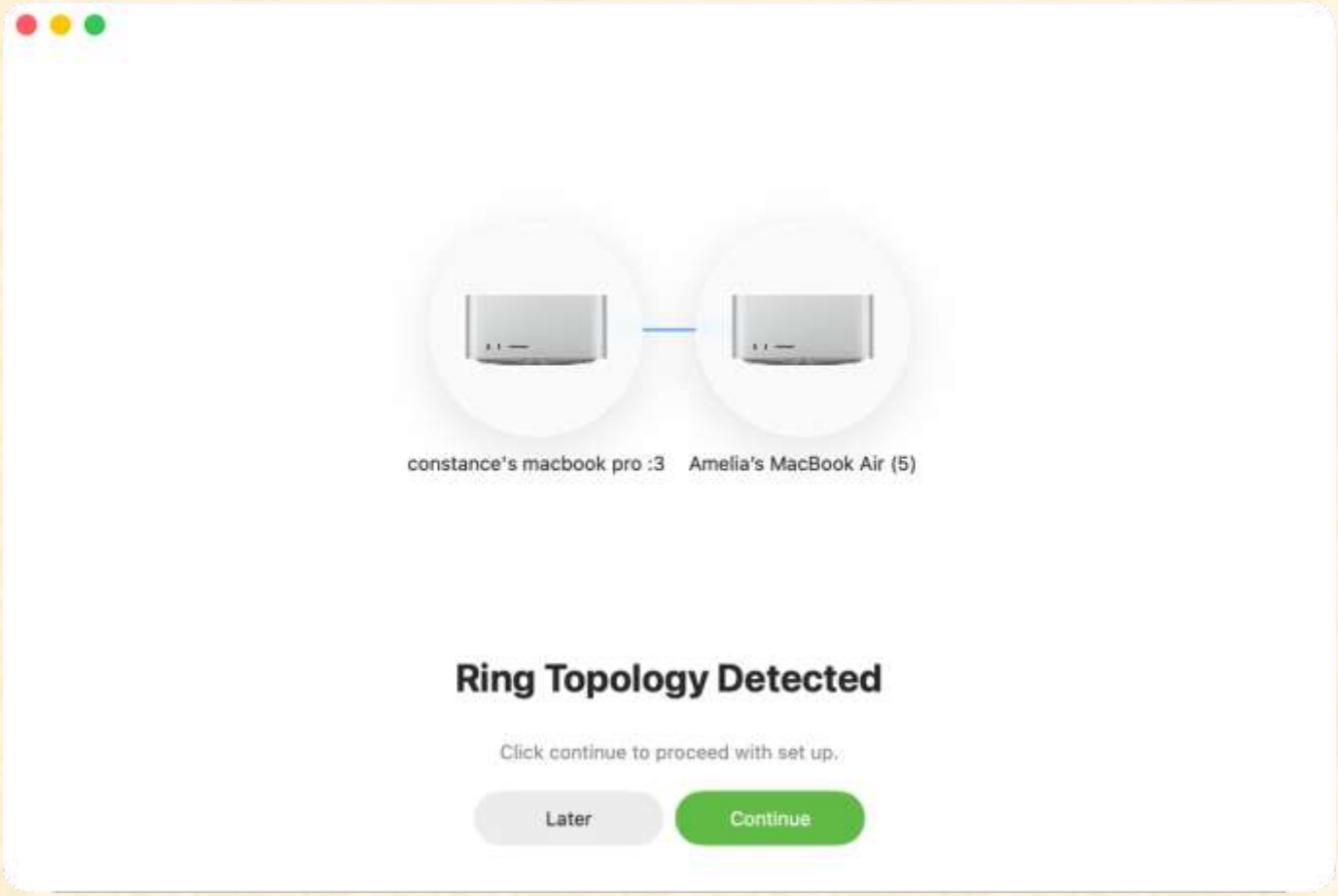
Intro Screen



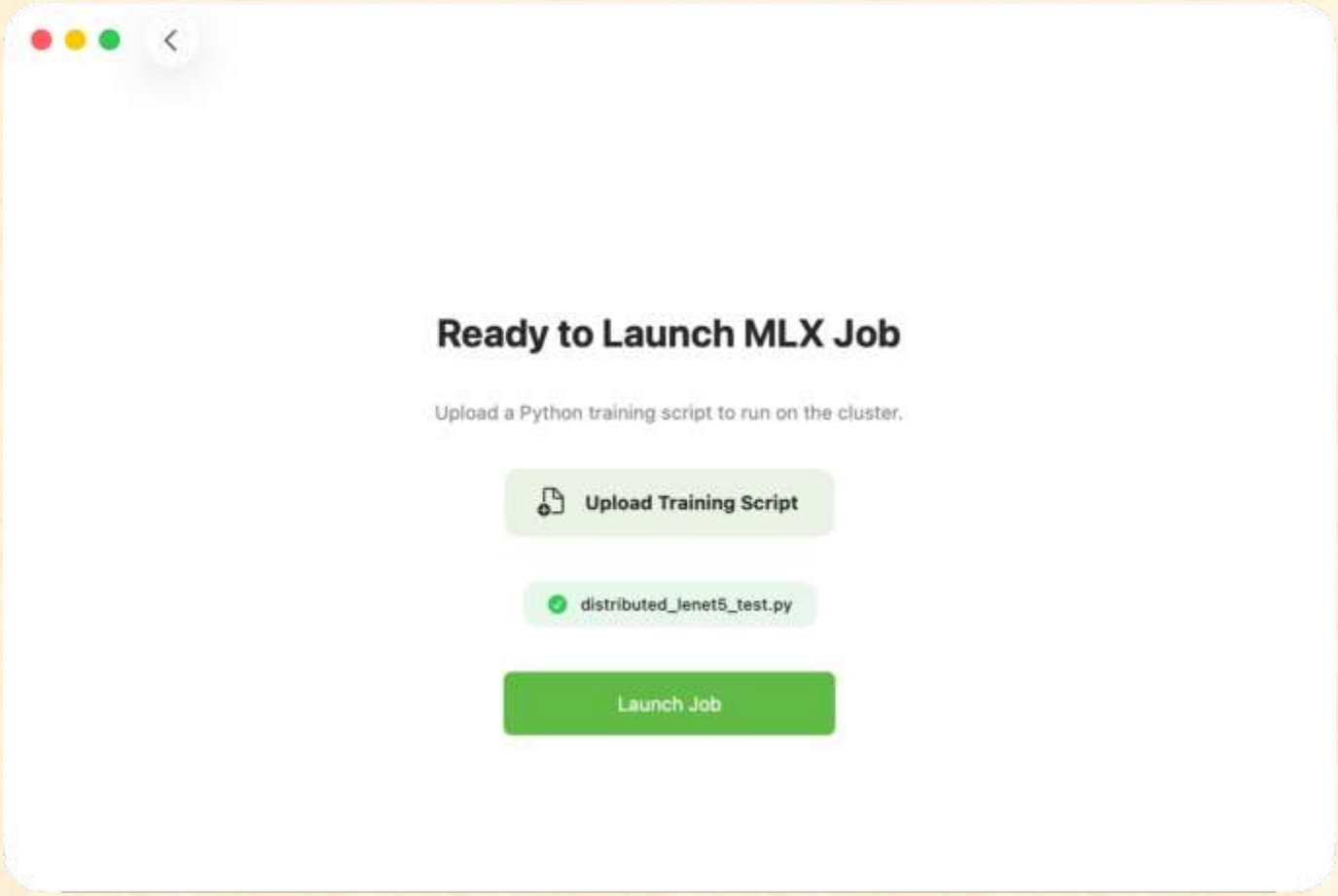
Device Discovery Screen



Device Topology Screen



Launch Screen



What’s left to do?

- More advanced timeout + failure recovery
- Ensure reliable cluster formation + peer discovery
- Add robust error handling + user-friendly diagnostics

Questions?

