What to Expect in This Course

While many organizations recognize that Machine Learning (ML) can drive significant value, successful deployments and effective operations are the main bottleneck for gaining value from AI. To address this, **organizations need to build the necessary ML engineering culture and capability by developing processes that unify ML system development (ML) with ML system operations (Ops) – in short, they need to develop an MLOps pipeline.**

To support the engineering community to realize MLOps in practice, Google made available to the world the practitioners guide to MLOps to help developers implement MLOps and smart practices during the ML workflow. We will go through this applied pipeline and **we will discuss the unique challenges that emerge as a result of deploying TinyML to many embedded devices.** Since MLOps requires the collaboration of business leads, subject matter experts, data scientists, data engineers, ML architects, software developers and maintainers, this course is designed to be accessible to all of these different backgrounds.

Prerequisites

The core of the course is designed as a **broad introduction to the many different stages of the MLOps pipeline.** We expect learners to enter this course either without any background in TinyML, or after taking Courses 2 and 3 en-route the advanced TinyML certificate, or after taking Courses 1, 2, and 3 en-route to completing both the standard and advanced TinyML certificates.

What This Course is NOT About

This is not a hands-on lab-based course. TinyML Courses 1, 2 and 3 are fairly hands-on. This course, by design, is meant to paint and give you a broad overview of MLOps.

Instead, this course is comprised of broad overview of MLOps with optional coding exercises, real-world case-studies, and links to resources to enable learners to build additional depth in the areas in which they are most interested. We hope that the broad approach enables the course to be accessible to all learners and introduce the important topic of MLOps for TinyML!