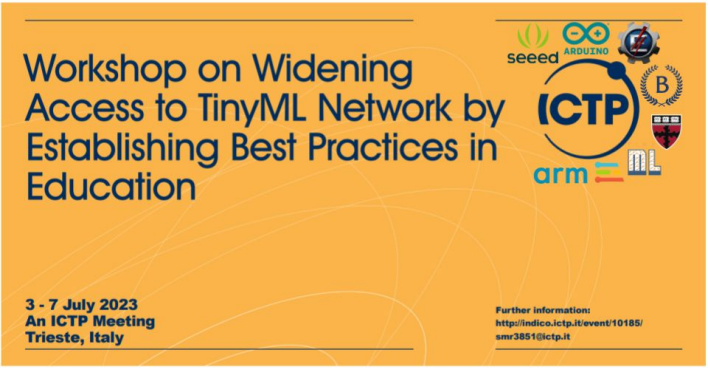

Launching TinyML edX and Long Term Support

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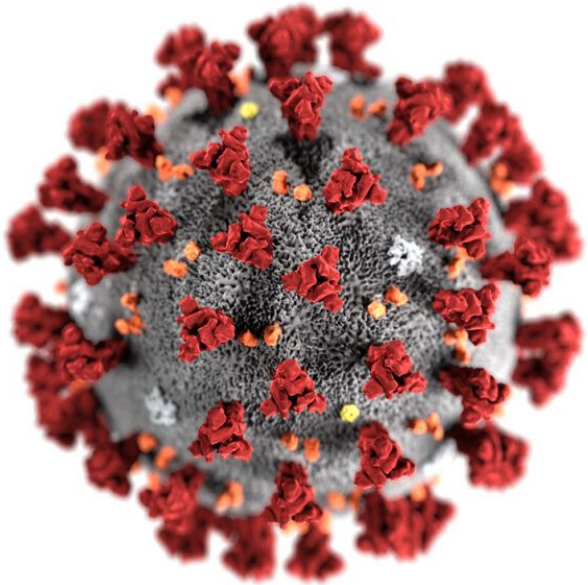
Launching TinyML edX and Long Term Support

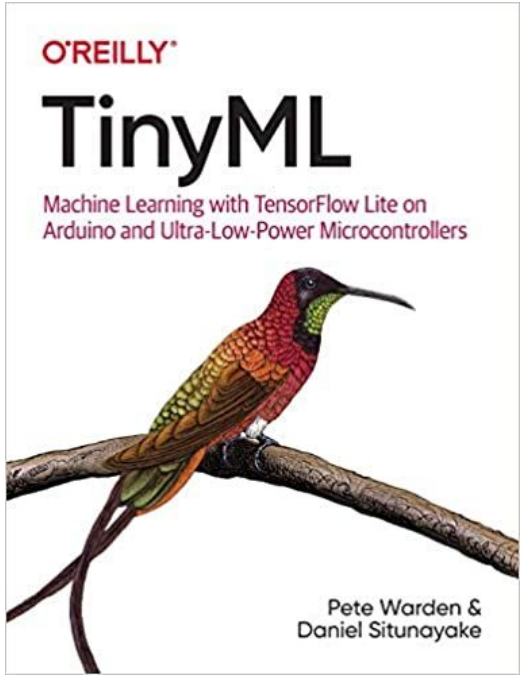
1. **Why** TinyML on edX?
2. The **Development** Process and Lessons Learned
3. **Long Term** Support Successes and Challenges

Why TinyML on edX?

Setting the Context



Late Spring 2020



Setting the Context

Let’s Teach a Course on TinyML

Setting the Context

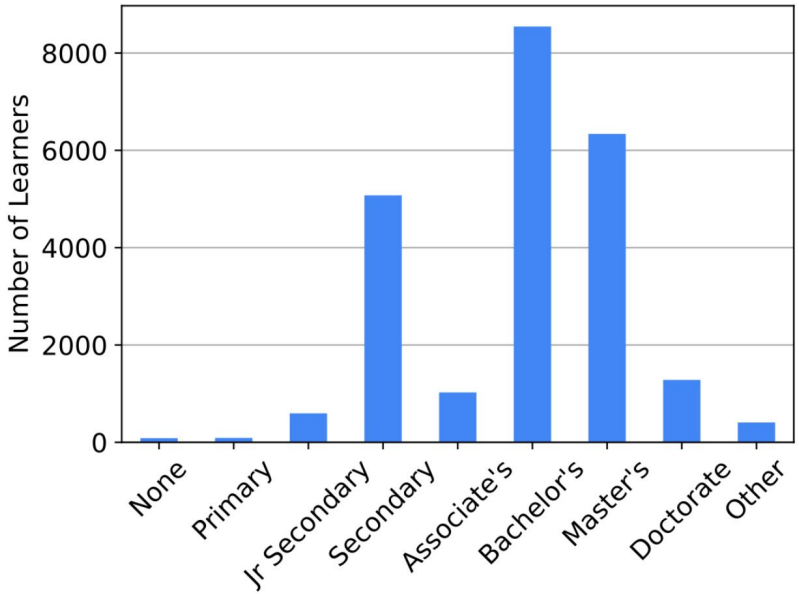
Can we broaden access to our course?

Why not work with us?

The Development Process and Lessons Learned

Why is an edX Course Different?

1. Students are both **More and Less** Experienced
2. Increased Challenge of **“Chunking”** to Preserve Learner Attention
3. **Inability to Directly Support** all Learners Especially with IT



The Development Process

1. **Course Design**
   - Domain Expert Interviews
   - Module Topic Outlines
   - Pedagogical Overlay and "Chunking"
2. **Content Development**
   - Distributed Development
   - Content Smoothing
   - Formatting and Slide Development
3. **Production**
   - Copyright Analysis
   - Video Recordings
   - Content Uploads
   - Creative Team Post-Processing
   - Final Reviews

Key Lessons Learned

Simplify the Barriers to Entry to Attract Students (Colab + Low-Cost Kit)

Real-World Hands-On Applications Retain Learners

Large Teams of Diverse Experts are Needed for Fast Timelines (Content + Formatting + Platform)

Industry Collaborations are Vital (Google, ARM, Arduino)

Process Matters – Collocation Does Not

Less is More

Hardware is Hard

Long Term Support Successes and Challenges

Long Term Support Successes and Challenges

1. Videos Can't be Changed (Easily)
2. Future Proofing by Design
3. Prepare for Surprises
4. Plan for Who Does the Support

- Videos as Background and **Fundamentals**.
- Code and Hands-On pegged to **Specific Versions** of OSS but prepare for the version to **No Longer Work**!
- 2 Year Support can be You – 5+ years needs a **Transition Plan**!

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