Technical Workshop
Academic High Altitude Conference

Ethan Harstad and Matthew Nelson

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Outline

What is mbed?

The mbed system provides:

- **Free** software libraries
- **Free** hardware designs
- **Free** online development tools
- Developer community

What this means

Shorter development, lower cost

Software Development Kit

- Open source C/C++ libraries
  Safe for personal or commercial use

- Hardware abstraction layer
  Isolate your application code from hardware changes

- Built from CMSIS APIs
  Work with high level functions or bare metal hardware

- Pretested startup and peripheral libraries

Hardware Development Kit

Online Development Tools

Outline

1 mbed Environment

2 Nucleo Platform

Nucleo F401RE

The Nucleo platform combines a programmer/debugger and an STM32 based development board with Arduino compatible expansion headers.

- Up to 84 MHz clock speed
- 512 KBytes flash memory
- 12-bit 2.4 Msps ADC with up to 10 channels
- Three hardware USART ports
- Three hardware SPI ports
- Three hardware I2C ports

Outline

1 mbed Platform

What is mbed?

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1. Open Session

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