

# Application to MOSS 2016

## **Workshop title:**

Creating Java bindings

## **Description:**

This workshop will cover ways of generating JNI code for modern C++ libraries, thus exposing native libraries in Java.

I will start by sharing with the audience the use-cases of having Java API available for IoT platforms. After that I will introduce Java Virtual Machine and how it allows code insertion at runtime, via shared libraries. Further on, I will present two open-source methods for exposing C++ functions in Java, both with hands-on exercises for the audience.

## **Workflow:**

- the instructor will show, using a real-life example, how the bindings can be developed
- the audience will have to generate Java bindings for certain C++ libraries and test their functionality

## **Student requirements:**

- laptop with administrative rights
- working Linux operating system (virtual machine or native), preferably with Java installed (runtime and compiler)

## **Classroom requirements:**

- projector
- internet access
- power sockets for all participants

## **Duration:**

2 hours

## **Intended audience:**

- IoT developers
- Java enthusiasts

## **Skill level:**

Intermediate

## **Instructor:**

Andrei Vasiliu – Software Engineer, IoT Performance Optimizations Team, Intel