



# IoT days – ST & Masters Poland

## Gdańsk/Kraków

21<sup>st</sup> – 23<sup>rd</sup> of April

5<sup>th</sup> – 7<sup>th</sup> of May



# IoT days – ST & Masters - TouchGFX

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## Embedded GUIs

### Based on the TouchGFX software framework and STM32 hardware

This seminar focus on the challenges of doing modern looking Graphical User Interfaces on low cost hardware – e.g. Cortex M – and how to overcome the challenges using the **TouchGFX** framework and **STM32** hardware.

The seminar both includes a thorough introduction to the aspects of graphics in the low cost segment as well as an introduction to the high performance graphics framework TouchGFX and a hands-on-programming TouchGFX workshop.

*Lecturer:* Jesper Hedegaard, Product Manager, TouchGFX at Draupner Graphics A/S

*Target participants:* GUI developers with basic software experience

# IoT days – ST & Masters – TouchGFX on STM32F4

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09:00 Welcome (Masters)

- Samsung - memories presentation (Kraków)
- Nec Tokin - inductors presentation (Straszyn)

10:00 **Programming of embedded GUI – lecturing (Draupner)**

- Doing modern looking graphics on low cost hardware
- The TouchGFX framework
- Introduction to TouchGFX development

12:00 Lunch - sandwiches

13:00 **TouchGFX workshop - Hands-on programming (Draupner):**

Participants will get TouchGFX up and running on their laptops, build simulator examples, download code to target, and explore the possibilities of doing applications on their own.

- Targets will be STM discovery kit and developer boards.
- Setup and build environment
- Examples
- Build for target
- Application development

15:00 Summary, Wall DEMO presentation

Laboratory desk available during whole day to explore/test/evaluate the development tools presented at TechDays. Individual consultations and meetings with suppliers.

# IoT days – ST & Masters products

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- 09:00 Welcome + Introduction + general presentation (Masters)
- 09:30 STM32 portfolio including ecosystem
- 10:00 ISM SubGHz (Spirit1)
- 10:30 Bluetooth Low Energy (BlueNRG)
- 11:00 WiFi modules
- 11:30 NFC
- 12:00 Lunch - sandwiches
- 13:00 Sensors – environmental, MEMS
- 13:30 GSM/GPS
- 14:00 Antennas (Unictron)
- 15:00 Wall DEMO presentation, Active demonstrations of above solutions

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# IoT days – ST & Masters – IS2T on STM32F4

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09:00 *Welcome + Introduction + general presentation (Masters)*

10:00 MicroEJ presentation and demo

- MicroEJ introduction
- MicroEJ SDK in development of embedded platforms
- UI and IoT demonstration based on ARM Cortex-M

11:00 Platform concept presentation and hand's on

- Introduce MicroEJ platform concept and SDK platform builder
- Configuration and platform creation
- Porting to new hardware
- C plug library (Java to C interface: SNI, Shielded Plug)

12:00 Lunch - sandwiches

13:00 Java/C interface

- Platform creation
- C functions creation
- C functions to call from Java (LED control example)

14:00 UI presentation

- MicroUI and MWT (widget framework) introduction

15:00 Summary, Wall DEMO presentation

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