Program

9th Conference of Open Innovations Community FRUCT

1st Regional MeeGo Summit Russia-Finland

AMICT 2011 workshop

Petrozavodsk, Russia
25-29 April 2011

GAUDEAMUS IGITUR,
JUVENES DUM SUMUS!
POST JUCUNDAM JUVENTUTEM,
POST MOLESTAM SENECTUTEM
NOS HABEBIT HUMUS.

UBI SUNT, QUI ANTE NOS
IN MUNDO FUERE?
VADITE AD SUPEROS,
TRANSITE AD INFEROS,
UBI JAM FUERE.

VITA NOSTRA BREVIS EST,
BREVI FINIETUR,
VENIT MORS VELOCITER,
RAPIT NOS ATROCITER,
NEMINI PARCETUR.

VIVAT ACADEMIA,
VIVANT PROFESSORES!
VIVAT MEMBRUM QUODLIBET,
VIVANT MEMBRA QUAELIBET!
SEMPER SINT IN FLORE!

VIVANT OMNES VIRGINES
FACILES, FORMOSAE!
VIVANT ET MULIERES,
TENERAE, AMABILES,
BONAE, LABORIOSAE!

VIVAT ET RESPUBLICA,
ET QUI ILLAM REGIT!
VIVAT NOSTRA CIVITAS,
MAECENATUM CARITAS,
QUAE NOS HIC PROTEGIT

PEREAT TRISTITIA,
PEREANT DOLORES,
PEREAT DIABOLUS,
QUIVIS ANTIBURSCHIUS,
ATQUE IRRISORES!

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The program of 9th FRUCT conference in Petrozavodsk

April 25-29, 2011 Petrozavodsk, Russia

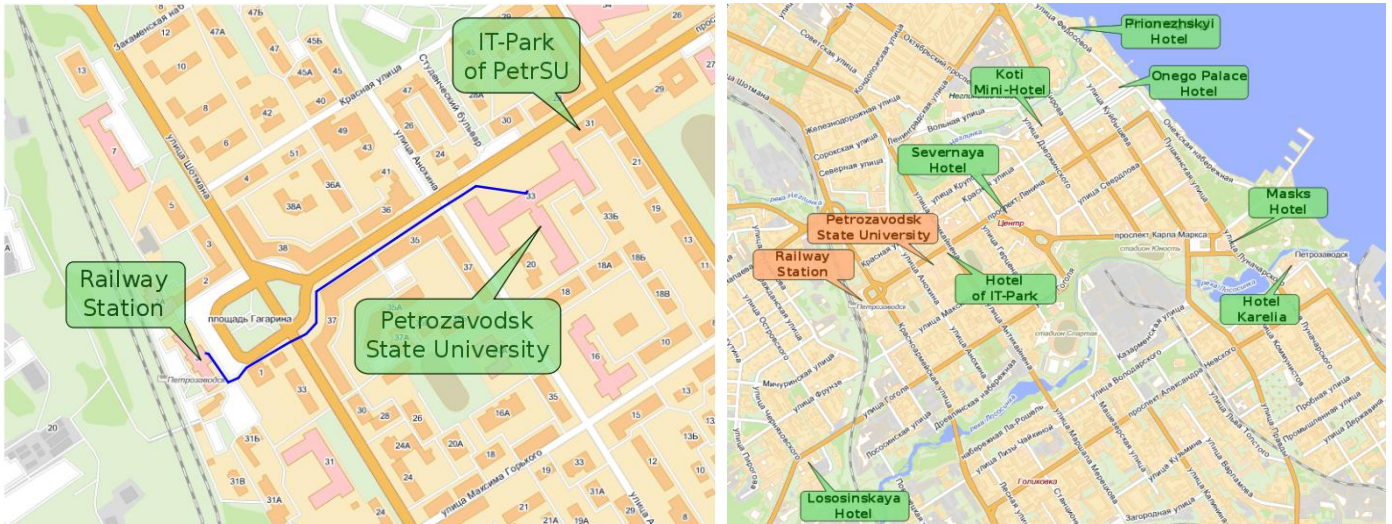**All events are free of charge, but all participants must be registered at www.fruct.org/conference9**

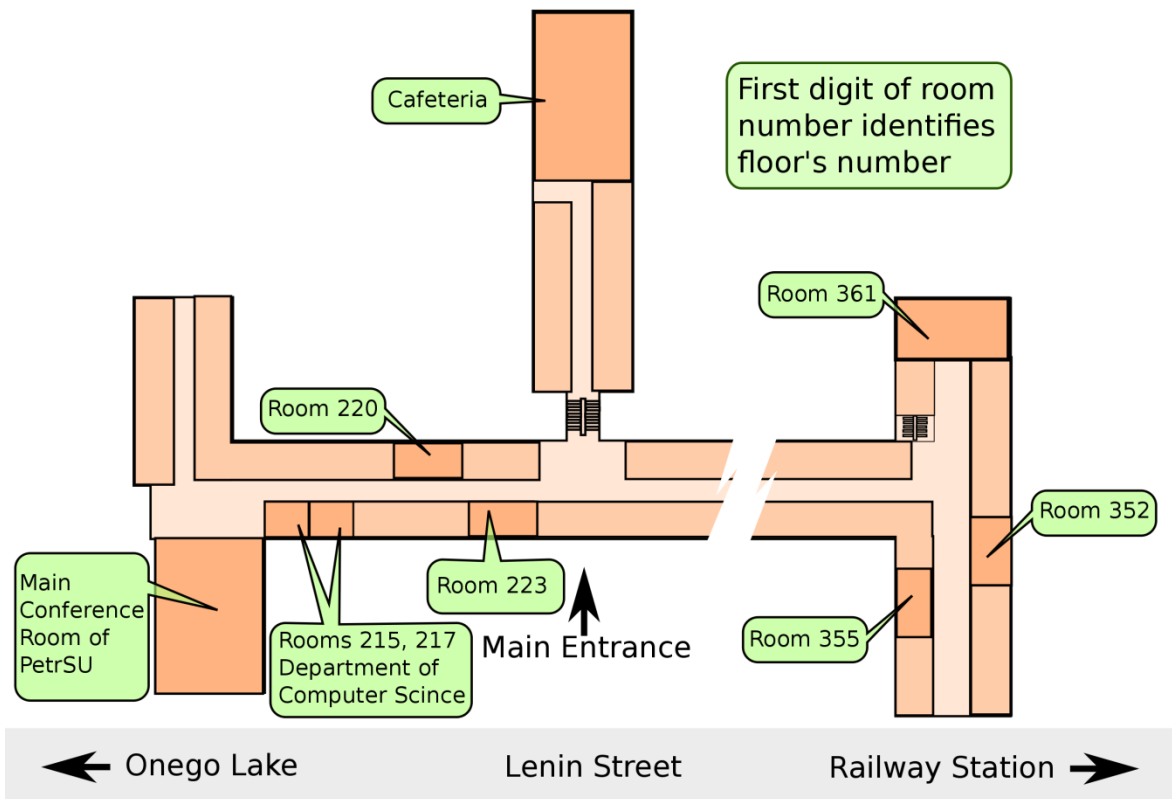| DATE	TIME	PROGRAM		
25.04.11	09.00-18.00	Qt training for beginners, Room 203 in IT-Park (in Russian)		
26.04.11	09.30-18.00			
27.04.11	09.00-10.00	Registration to the conference, Room 361		
	10.00-13.00	Opening of 9th FRUCT conference and Plenary session, Room 361 (in English)		
	13.00-14.00	**Lunch break**		
	14.00-16.00	9th FRUCT conference: Network Technologies I, Room 352 (in English)	Regional MeeGo Summit Russia-Finland Room 355 (in English)	Smart-M3 platform training, Room 203 in IT-Park (in Russian)
	16.00-16.30	**Coffee-break**		
	16.30-18.00	Open info session about FRUCT and Discussion session of FRUCT Web Working Group, Room 355 (in English)		
28.04.11	09.30-13.00	9th FRUCT conference: Mobile Video & 9th FRUCT conference: Supporting Technologies, Room 352 (in English)	Regional MeeGo Summit Russia-Finland Room 355 (in English)	AMICT 2011 conference, Room 220 (in English)
	13.00-14.00	**Lunch break**		
	14.00-16.00	9th FRUCT conference: Network Technologies II, Room 352 (in English)	9th FRUCT conference: Mobile Services, Room 355 (in English)	Meeting of FRUCT Smart Spaces WG, Room 223 (in English)
				Meeting of FRUCT MeeGo and Qt WGs, Room 223 (in English)
	16.00-16.30	**Coffee-break**		
	16.30-18.00	Presentation of demos, Room 361 (in English)		
	19.00-21.30	**Social Event and Demo Session**		
29.04.11	10.00-13.00	9th FRUCT conference: Mobile Health Care, Room 361 (in English)	MeeGo training for beginners, Room 203 in IT-Park (in Russian)	
	13.00-14.00	**Lunch break**		
	14.00-16.00	9th FRUCT conference: Embedded Networks, Room 361 (in English)	MeeGo training for beginners, Room 203 in IT-Park (in Russian)	
	16.00-16.20	**Coffee-break**		
	16.20-18.20	9th FRUCT conference: Smart Spaces, Room 361 (in English)	MeeGo training for beginners, Room 203 in IT-Park (in Russian)	
	18.20-18.30	**Official closing of 9th FRUCT conference, Room 361 (in English)**		

How to find us

All sessions of the 9th FRUCT conference, 1st Regional MeeGo Summit Russia-Finland and AMICT 2011 workshop will be held in the main building of Petrozavodsk State University, address: Lenin str. 33, and all the training (i.e. Qt training, Smart-M3 training and MeeGo training) will be held in the computer class (room 203) of IT-Park of PetrSU, address: Lenin str. 31. This location is in the center of Petrozavodsk downtown, only a few minutes away from the railway station.

The map of Petrozavodsk city center with marks for the most important conference locations (railway station, university building, recommended hotels and so on) is presented below:

Also for navigation inside the PetrSU building you can use the following scheme that shows location of the registration desk, main conference rooms, places for coffee break and social events and recommended places for lunch.

Map of PetrSU Main Building, 33, Lenin St.

Program of the 9th FRUCT conference

April 25-29, 2011 Petrozavodsk, Russia

All events are free of charge, but all participants must be registered at www.fruct.org/conference9

April 27 (Wednesday)
Petrozavodsk State University, Lenin str., 33

09:30	30m	**Registration (room 361)**
Session: Official opening of 9th FRUCT conference		
Room: Room 361		
10:00	25m	Opening of the 9th FRUCT conference, latest updates to the program and welcome words
10:25	20m	Nokia for Developers, Alexey Kokin, Nokia, Russia
10:45	45m	On the Edge of Mobile Evolution, Dmitry Petrov, Magister Solutions Ltd, Finland
11:30	30m	Recovery of the Russian IT market. New trends and opportunities, Valentin Makarov, President of RUSSOFT Association, Russia
12:00	1h	The history and future of Qt, Knut Yrvin, Nokia, Norway
13:00	1h	**Lunch break**

Session: Network Technologies I		**Session:** Regional MeeGo Summit Finland-Russia	
Room: 352 Chairman: Yury Bogoyavlenskiy		**Room:** 355 Chairman: Dmitry Petrov	
14:00	30m	Host Identity Protocol for Mobile WLAN Access, Andrei Gurtov, University of Oulu, Finland	Automatic testing tools in MeeGo, Timofey Turenko, Nokia, Finland
14:30	30m		Intel's Atom software strategy execution through MeeGo and AppUp, Igor Odintsov, Intel, Russia
15:00	20m	Optimization of Network Overhead for Transport Layer Coding, Dmitry Malichenko, Saint-Petersburg University of Aerospace Instrumentation, Russia	Differences in automated testing on MeeGo and Android mobile platforms, Oleksandr Kachur and Vladimir Sayenko, Kharkiv National University of Radio Electronics, Ukraine
15:20	20m	A Solver-resistant Challenge Response Spam Protection System, Alexander Pyattaev, Tampere University of Technology, Finland, Vladimir Sadovnokov, Saint-Petersburg State University of Telecommunications, Russia	Optimizing the performance of the algorithms block data processing in Linux, Anton Ovseenko and Victor Minchenkov, Saint-Petersburg State University of Aerospace Instrumentation, Alexander Povalyaev, EMC Russia Center of Excellence, Russia
15:40	20m	Design and Development of a Client Relay System Level Simulator, Alexander Pyattaev, Sergey Andreev and Yevgeni Koucheryavy, Tampere University of Technology, Finland	Educational Course and Workshops on Software Development of Mobile Applications for the Intel Atom, Oleg Granichin and Vladimir Kiyaev, Saint Petersburg State University, Russia
16:00	30m	**Coffee-break**	

Session: Open info session about FRUCT and Discussion session of FRUCT Web Working Group		
Room: 355 Chairman: Sergey Balandin		
16:30	30m	FRUCT Program Description, Status and Future Perspectives, Sergey Balandin, FRUCT, Finland
17:00	30m	Overview of FRUCT Web Working Group activities, Anton Sergeev, FRUCT Web WG secretary, Russia
17:30	30m	Open discussion and brainstorming on development of FRUCT Web resources
18:00		**Closing of Day 1 followed by the excursion in Petrozavodsk and meeting of FRUCT Advisory Board**

April 28 (Thursday)
Petrozavodsk State University, Lenin str., 33

09:30 30m	**Registration and Day Agenda (room 215)**	

Session: Mobile Video **Room:** 352　　　　Chairman: Andrei Gurtov		**Session:** Regional MeeGo Summit Finland-Russia **Room:** 355　　　　Chairman: Timofey Turenko	
10:00	20m	An overview of H.264/AVC video compression standard, Ann Ukhanova, DTU Fotonik, Denmark	MeeGo AR-Drone application: MAR-Drone, Kate Alhola and Alexander Trufanov, Nokia, Finland
10:20	20m		SketchIt: Simple Vector Scheme Editor for Mobile Devices with Touch Screen, Vitaly Petrov and Evgeny Linsky, Saint-Petersburg State University of Aerospace Instrumentation, Russia
10:40	20m		Social network plugin for telepathy framework, Kirill Ivashov, Petrozavodsk State University, Russia
11:00	20m	Low-complexity video compression based on 3-D DWT and fast entropy coding, Evgeny Belyaev, Tampere University of Technology, Finland	MySocials Libraries: Unified Access to Services of Social Networks, Sergey Zaharov, Pavel Shiryaev, Anna Samoryadova and Kirill Kulakov, Petrozavodsk State University, Russia
11:20	20m	Usableness improving for the nonlocal means image de-noising algorithm to use them on low-powered embedded computing units, Boris Basilev, Nizhny Novgorod State University, Russia	MySocials Gallery: Application for Browsing Galleries of Images from Social Networks, Anna Samoryadova, Andrew Bogachev, Pavel Shiryaev and Kirill Kulakov, Petrozavodsk State University, Russia
Session: Mobile Platforms Supporting Research **Room:** 352　　　　Chairman: Andrei Gurtov			HiveMind Collaborative Mind Map Editor: Architecture and Implementation of Network Subsystem, Ilya Paramonov, Andrew Vasilev, Oleg Kandaurov and Alexander Kulikov, Yaroslavl State University, Russia
11:40	20m	Model checking approach to the correctness proof of complex systems, Marina Alekseeva and Ekaterina Dashkova, Yaroslavl State University, Russia	
12:00	20m	Investigation of flow graphs optimization methods used in optimizing compilers, Eugene Gavrin, Saint-Petersburg University of Aerospace Instrumentation, Russia	Text Recognition using OpenCV libraries for devices based on MeeGo, Iliya Mironov and Diana Ilina, Nizhny Novgorod State University, Russia
12:20	20m	Graphical-based User Authentication Schemes for Mobile Devices Evaluation, Vitaly Petrov and Alexandra Afanasyeva, Saint-Petersburg University of Aerospace Instrumentation, Russia	Protection of premium multimedia content in MeeGo, Sergey Ivanov, Nizhny Novgorod State University, Russia
12:40	20m	The patterns of formalization of nature-language messages in IT security monitoring systems in open computer networks, Victoria Korzhuk and Ilya Lebedev, Saint-Petersburg National Research University of Information Technologies, Mechanics and Optics, Russia	Video capturing service with social networks functionality for MeeGo, Sergey Ivanov and Michail Smirnov, Nizhny Novgorod State University, Russia
13:00 1h		**Lunch break**	
Session: Network technologies II **Room:** 352　　　　Chairman: Ilya Paramonov		**Session:** Mobile Services **Room:** 355　　　　Chairman: Petr Bazanov	
14:00	20m	Novel Techniques for Measuring Anxieties on the Internet, Santosh Kalwar, Kari Heikkinen and Jari Porras, Lappeenranta University of Technology, Finland	MediaInsight - real-time automatic speech recognition technology, Konstantin Firun, St.-Petersburg State University ITMO, Russia
14:20	20m	Monitoring and Prediction of Transport Protocols Throughput for Complex Networks, Alexander Sannikov, Olga Bogoiavlenskaia and	Poster presentations management system, Irina Pochinok, Yuri Katkov, Dmitry Muromtsev and Pavel Smirnov, Saint-Petersburg National Research

		Iurii Bogoiavlenskii, Petrozavodsk State University, Russia	University of Information Technologies, Mechanics and Optics, Russia
14:40	25m	Enterprise Traffic Analysis, Andrei Gurtov, University of Oulu, Finland	Library OSMaps, Denis Bespalov, Nizhny Novgorod State University, Russia
15:05	15m	SVG Player Project, Svetlana Marchenko, Saint Petersburg Academic University, Russia	Virtual Telescope project development, Alexandra Reyss, Petrozavodsk State University, Russia
15:20	20m	Energy Efficient Operation of a Wireless Communication System, Alexey Anisimov, Pavel Gonchukov and Andrey Turlikov, Saint-Petersburg University of Aerospace Instrumentation, Russia, Sergey Andreev, Tampere University of Technology, Finland	Location based platform for public transport monitoring system, Mark Zaslavskiy, Saint-Petersburg Electrotechnical University "LETI", Russia
15:40	20m	Improving IPTV on-demand Transmission Scheme for Broadband Network, Boris Goldshtein and Gerges Mansour, Saint-Petersburg State University of Telecommunications, Russia	LIST service: architecture redesign, Denis Bespalov and Gregory Serebryakov, Nizhny Novgorod State University, Russia
16:00	30m	Coffee-break	

Session: Presentation of demos

Room: 361   Chairman: Alexander Borodin

16:30	5m	SmartScribo + SmartConference, Ivan Galov and Dmitry Korzun, Petrozavodsk State University, Alexey Kashevnik, Saint-Petersburg Institute for Informatics and Automation of Russian Academy of Sciences, Yury Korolev and Kirill Krinkin, Saint-Petersburg Electrotechnical University "LETI", Russia
16:35	5m	Project MySocials (Gallery for ВКонтакте, Facebook and Flickr, access using Telepathy on libmsavk, QMF-Socials plugins), Anna Samoryadova and Sergey Zakharov, Petrozavodsk State University, Russia
16:40	5m	Liquid / Shariks games, Konstantin Kirpichonock and Vladimir Dmitriev, Petrozavodsk State University, Russia
16:45	5m	Monitoring of TCP connection tools at the kernel level, Alexander Sannikov, Petrozavodsk State University, Russia
16:50	5m	HiveMind project (improved teamwork tool), Oleg Kandaurov, Yaroslavl State University, Russia
16:55	5m	Octotask project, Denis Laure, Yaroslavl State University, Russia
17:00	5m	Connected Health - demo part of mobile health monitoring system, Maxim Yatskovsky and Oleg Medvedev, Moscow State University, Russia
17:05	5m	Smart Board demo for MeeGo with Smart-M3 platform, Kirill Yudenok, Saint-Petersburg Electrotechnical University "LETI", Russia
17:10	5m	3D motion CAPTCHA demo, Alexander Pyattaev, Tampere University of Technology and Vladimir Sadovnikov, Saint-Petersburg State University of Telecommunications, Russia
17:15	5m	Video capturing service with social networks functionality for MeeGo, Ivanov Sergey, Nizhny Novgorod State University, Russia
17:20	5m	Monitoring movements of the human eye, Ilina Diana, Nizhny Novgorod State University, Russia
17:25	5m	Hands free email for MeeGo, Eugene Basargin, Higher School of Economics, Russia
17:30	5m	LIST service: the new abilities, Serebryakov Gregory, Nizhny Novgorod State University, Russia
17:35	5m	OSMaps library, Bespalov Denis, Nizhny Novgorod State University, Russia
17:40	5m	MAR-drone quadrocopter demo on MeeGo, Kate Alhola and Timofey, Nokia, Finland
17:45	5m	SketchIt, Vitaly Petrov and Evgeny Linsky, Saint-Petersburg State University of Aerospace Instrumentation, Russia
17:50	5m	PersonalRobotics: through Game to Science, Vladimir Kiyaev, Saint-Petersburg State University, Russia
17:55	5m	Poster presentation management system, Pavel Smirnov and Yuri Katkov, Saint-Petersburg National Research University of Information Technologies, Mechanics and Optics, Russia
18:00	5m	Nostalgia: how to use QtQuick to give second life to the games of the past Vitaly Petrov and Evgeny Linsky, Saint-Petersburg State University of Aerospace Instrumentation, Russia
19:00	2.5h	**Social Event and Demo Session (Cafeteria, main building)**

April 29 (Friday)
Petrozavodsk State University, Lenin str., 33

09:30	30m	**Registration and Day Agenda (room 215)**

Session: Mobile Healthcare
Room: 361   Chairman: Yury Sheynin

10:00	1h	The Current State of m-Health projects in Russia and in the World-Review Lecture, Oleg Medvedev and Maxim Yatskovsky, Moscow State University, Russia
11:00	45m	Future Internet as enabler for better health, Heikki Huomo, University of Oulu, Finland
11:45	20m	Matching quality investigation of Motion Estimation Algorithms, Alexander Setkov, Saint-Petersburg University of Aerospace Instrumentation, Russia
12:05	20m	Algorithms for determining the centre of the pupil for the detection of eye movements for work with mobile devices, Diana Ilina, Iliya Lysenkov and Michail Smirnov, Nizhny Novgorod State University, Russia
12:25	35m	Adaptive gaze tracking based on fusion of starburst algorithm with object detection & natural feature tracking, Petr Bazanov, Nokia, Finland
13:00	1h	**Lunch break**

Session: Embedded networks
Room: 361   Chairman: Dmitry Korzun

14:00	40m	Researches in embedded solutions and networks area, Yuriy Sheynin and Valentin Olenev, Saint-Petersburg University of Aerospace Instrumentation, Russia
14:40	20m	Administration and configuration of communication SpaceWire network, Ksenia Khramenkova and Ludmila Koblyakova, Saint-Petersburg University of Aerospace Instrumentation, Russia
15:00	20m	Embedded systems' transport protocol choosing for modelling over the SpaceWire model, Ilya Korobkov, Saint-Petersburg University of Aerospace Instrumentation, Russia
15:20	20m	RMAP protocol SystemC model: detailed description and modelling features, Nikita Martynov, Saint-Petersburg University of Aerospace Instrumentation, Russia
15:40	20m	The testing of SpaceWire network switching devices, Stanislava Andreeva, Ludmila Koblyakova and Victor Stepanov, Saint-Petersburg University of Aerospace Instrumentation, Russia
16:00	20m	**Coffee-break**

Session: Smart Spaces
Room: 361   Chairman: Sergey Balandin

16:20	20m	Smart Space Working Group Activity Overview, Alexey Kashevnik, Saint-Petersburg Institute for Informatics and Automation of Russian Academy of Sciences, Russia
16:40	20m	A Blogging Application for Smart Spaces, Diana Zaiceva, Ivan Galov and Dmitry Korzun, Petrozavodsk State University, Russia
17:00	20m	Blogging in the Smart Conference System, Dmitry Korzun and Ivan Galov, Petrozavodsk State University, Alexey Kashevnik and Nikolay Shilov, Saint-Petersburg Institute for Informatics and Automation of Russian Academy of Sciences, Kirill Krinkin and Yury Korolev, Saint-Petersburg Electrotechnical University "LETI", Russia
17:20	20m	An audiovisual system of monitoring of participants in the smart meeting room, Alexander Ronzhin, Saint-Petersburg Institute for Informatics and Automation of Russian Academy of Sciences, Russia
17:40	20m	Extensions for Smart Conference System, Alexander Malakhov and Evgeny Linsky, Saint-Petersburg University of Aerospace Instrumentation, Russia
18:00	20m	Multilingual Ontology Library Generator for Smart-M3 Application Development, Alexandr Lomov, Pavel Vanag and Dmitry Korzun, Petrozavodsk State University, Russia
18:20	10m	**Official closing of 9th FRUCT conference**

Qt training for beginners (in Russian)

Training course dates: 25-26 April 2011   Place: Room 203 of IT-Park of PetrSU, Lenin str. 31

Description

Qt is the cross-platform modular application framework that includes class-library and tools, which are widely used for software development. By using Qt framework one can develop the same source code of applications for Linux desktops as well as for a variety of mobile platforms such as Symbian, Maemo, MeeGo. Qt is fast to learn and easy to use development platform.

The purpose of this training is to develop basic Qt competences. A two-day hands-on training is for everyone to get acquainted with this framework and begin to develop applications. The course is indented for beginners but will be also useful for experienced developers.

April 25 (Monday)
IT-Park of Petrozavodsk State University, Lenin str., 31

Session: Qt training for beginners		
Room: 203		Main trainer: Alexander Borodin
09:00	30m	Registration of participants. Equipment and software check
09:30	1h 45m	Qt platform overview. Introduction and simple examples. Demos: using CLI utilities and GUI tools to develop and debug applications. Qt concepts explained: signals and slots, meta-objects, data collections, qmake. How to use help.
11:15	15m	Coffee-break
11:30	1.5h	Classes derived from QObject. Widgets hierarchy. Layouts and positioning. Data containers. Files and streams. Rapid GUI design using Qt Designer (part of QtCreator) and integration designer generated classes to the project.
13:00	1h	Lunch
14:00	1h 40m	Developing application based on Main Window. Adding menus and toolbars. Providing short messages with status bars. Creating and using Dialogs.
15:40	20m	Coffee-break
16:00	1h	Displaying data using interview framework. Model-view-controller and corresponding Qt classes.
17:00	1h	Creating widgets. Sub-classing and creating from scratch. Catching the events. Working with plugins.

April 26 (Tuesday)
IT-Park of Petrozavodsk State University, Lenin str., 31

Session: Qt training for beginners		
Room: 203		Main trainer: Alexander Borodin
09:30	1.5h	Graphics in Qt. Drawing with QPainter. QtSvg module features. Qt interface to OpenGL.
11:00	20m	Coffee-break
11:20	1h 40m	Overview of Qt modules. Networking classes, database classes. Scripting the app. Threading. Unit testing features.
13:00	1h	Lunch
14:00	2.5h	QtQuick technology overview. Simple examples
16:30	20m	Coffee-break
16:50	1h 10m	Distribution issues. Building and packaging applications for Symbian and Maemo. Providing application to OviStore. Discussion.
18:00		Q&A section and closing of Qt training

Prerequisites

Training participants are supposed to have basic C++ programming skills and GNU/Linux development experience.

AMICT 2011 workshop (in English)

Workshop date: 28 April 2011 (morning)   Place: Room 220 of the main building of PetrSU, Lenin str. 33

The Annual International Workshop on Advances in Methods of Information and Communication Technology (AMICT 2011) is held in Petrozavodsk (Russia) on April 28, 2011, in co-location with the 9th FRUCT Conference. The workshop organizers are Petrozavodsk State University, University of Helsinki and FRUCT. AMICT 2011 covers various ICT areas that include, but are not restricted to, the following:

- Information technology,
- Network communication,
- Information systems,
- Theoretical and applied computer science,
- Algorithms and Modeling.

Talks include presentations of particular systems, experiments, theoretical research, as well as more general, philosophical/educational/methodological presentations. We are especially interested in discussions related to ICT education and research, including issues of "Cross-border education in ICT" and "Cooperation between universities and industry". The program of AMICT 2011 workshop is presented below:

Session: AMICT 2011 workshop		
Room: 220		Chairman: Yury Bogoyavlenskiy
09:30	40m	Floating Content: Information Sharing in Urban Areas, Jussi Kangasharju, University of Helsinki, Finland
10:10	40m	PURSUIT: Publish-Subscribe Internet Technology, Arto Karila, Helsinki Institute for Information Technology, Finland
10:50	20m	Some analytical aspects of regenerative simulation of fluid models, Evsey Morozov, Ruslana Goricheva, Oleg Lukashenko, Institute of Applied Mathematical Research KarSC RAS, Russia, Michele Pagano, University of Pisa, Italy
11:10	15m	Simulation of the fluid system with long-range dependent input, Mikhail Nasadkin, Petrozavodsk State University, Russia, Oleg Lukashenko, Institute of Applied Mathematical Research KarSC RAS, Russia
11:25	15m	Optimizing performance in heavy-tailed system: a case study, Lyubov Potakhina, Petrozavodsk State University, Russia, Alexander Rumyantsev, Institute of Applied Mathematical Research KarSC RAS, Russia
11:40	25m	Large-scale experiments on a cluster, Liang Wang, Helsinki Institute for Information Technology, Finland
12:05	25m	How to avoid plagiarism, Tiina Niklander, University of Helsinki, Finland
12:30	30m	Round table on ICT cooperation between University of Helsinki and Petrozavodsk State University

This workshop is a result of the long-term cooperation between the computer science departments of the universities of Helsinki and Petrozavodsk (UH and PetrSU). Its roots come to 1993, when Dr. Iurii Bogoiavlenskii visited the Department of Computer Science of UH. In the response of this visit, PetrSU invited Dr. Timo Alanko to read an intensive lecture course on "Performance analysis" to the PetrSU CS students.

Since 1994 the workshop had had the name "Finnish Data Processing week (FDPW) at the University of Petrozavodsk" being mainly intended as a "guest lecturers' week" with the goal to give some advanced elective courses to the PetrSU CS students. In 1997, the FDPW concept undertook a revision and it was transformed into an international scientific seminar, devoted to presentations and discussions on work in progress and results achieved in research and development within the distributed systems and data communications areas.

The next transformation was done in 2006, when the seminar topic area and the spectrum of participants became so wide that the name FDPW cannot reflect adequately the essence of the event. Since that time, FDPW was renamed to AMICT, the Annual International Workshop on Advances in Methods of Information and Communication Technology.

Programs of the previous seminars can be found at http://www.cs.karelia.ru/fdpw/index.php.en. Since 1997, UH and PetrSU publish the seminar proceedings, 11 volumes have been published.

Smart-M3 platform training (in Russian)

Training course dates: 27 April 2011 (afternoon) Place: Room 203 of IT-Park of PetrSU, Lenin str. 31

Overview

The training session gives an overview of the Smart Space concept using the Smart-M3 platform as an open-source implementation (http://sourceforge.net/projects/smart-m3/) of this concept. We study different available APIs for the Smart-M3 platform and simple programming models for Smart-M3 applications.

Smart-M3 is an interoperability platform that provides an infrastructure to share information expressed in RDF. The platform consists of a Semantic Information Broker (SIB) that stores the information and Knowledge Processors (KP) that can insert, remove, query, and subscribe to information. The Smart Space Access Protocol (SSAP) is the protocol that a KP uses to access its SIB. The information is stored in SIB as an RDF triple store according to standardized or otherwise agreed ontology. Information sharing helps the participating KPs to gather relevant context information, leading to more efficient operation and innovative multi-device use cases. For more information about Smart-M3 please check http://en.wikipedia.org/wiki/Smart-M3 and http://fruct.org/m3.

The developers of the application logic of KPs use a knowledge processor interface (KPI) to access information in smart space. There are two classes of KPI, depending on the code abstraction level.
1. Low-level KP programming in terms of RDF triples.
2. High-level KP programming in terms OWL ontology.

Low-level access requires the user code to operate with RDF triples, directly following the SSAP operations. In contrast, high-level KP development is based on an ontology library, and the code deals with ontology classes, properties, and instances.

The focus is on step-by-step developing a simple "Hello World" application consisting of several KPs. For KP programming we show two KPIs: KPI_low (low-level, ANSI C, low-performance devices) and SmartSlog ontology library (high-level, ANSI C and C#, low-performance devices). For simple ontology manipulation we use Protege.

The training agenda
1. Overview of the Smart Space concept, Smart-M3 platform, Smart-M3 programming models, and available KPIs.
2. Smart-M3 KPI: different code abstraction levels. Case studies: KPI_low and SmartSlog.
3. Hello world application using KPI_low
4. Hello world application using SmartSlog. Web Ontology Language and the Protégé tool.
5. Cross-platform applications: demos for Linux, Maemo5, and MeeGo.

Prerequisites
The number of PC-based work places is limited. We recommend you to take your own laptop. Please make sure that the following software is installed in advance.
*   Smart-M3 platform (http://sourceforge.net/projects/smart-m3/)
*   KPI_low (http://sourceforge.net/projects/kpilow/)
*   SmartSlog (http://sourceforge.net/projects/smartslog/)
*   Protege (http://protege.stanford.edu/)

Another option is own laptop with installed Oracle VirtualBox (http://www.virtualbox.org/). In this case you will be supported with the image with installed Linux, Smart-M3, and other tools.

Recommended skills for the audience:
*   Basic skills of C
*   Basic skills in using GNU/Linux platform as development environment (make, gcc)

MeeGo training for beginners (in Russian)

Training course dates: 29 April 2011   Place: Room 203 of IT-Park of PetrSU, Lenin str. 31

Introduction

MeeGo — a Linux-based open source operating system primarily targeted to mobile devices. MeeGo OS is intended for a wide range of devices from netbooks and smartphones to in-vehicle infotainment systems. The purpose of this training is to form basic MeeGo development competences.

April 29 (Friday)
IT-Park of Petrozavodsk State University, Lenin str., 31

		Session: MeeGo training for beginners
Room: 203		Main trainer: Alexander Borodin
09:00	30m	Registration of participants. Equipment and software check
09:30	30m	MeeGo platform from developer point of view. API architecture. Developer tools
10:00	1h	Installing and configuring MeeGo SDK on Windows and Linux. Using MADDE for toolchains and runtimes management. Running runtimes.
11:00	20m	Coffee-break
11:20	1h 40m	Creating simple application and building distribution package with QtCreator. Installing the application to the runtime and running it.
13:00	1h	Lunch
14:00	1h 40m	Creating RPM packages for MeeGo. Using the OBS
15:40	20m	Coffee-break
16:00	1h	QtMoblity overview. System information and sensors APIs
17:00	1h	QtMobility Personal information management and communication APIs
18:00		Q&A section and closing of Qt training

Prerequisites

Approximately 15 preconfigured computers will be available in training room. If you would like to use your own laptop then you will be provided with LiveDVD contained all needed tools. But you must check your hardware requirements (http://wiki.meego.com/SDK/Docs/1.1/MeeGo_SDK_Graphics_Acceleration) beforehand. Also, you can install MeeGo SDK (http://wiki.meego.com/SDK/Docs/1.1/Getting_started_with_the_MeeGo_SDK_for_Linux) before the training.

Training participants are supposed to have basic C programming skills and GNU/Linux development experience.

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The 9ᵗʰ Conference of Open Innovations Community FRUCT, 1ˢᵗ Regional MeeGo Summit Russia-Finland and AMICT 2011

Proceedings

Petrozavodsk, Russia
April 25-29, 2011

http://www.fruct.org   info@fruct.org

CALL FOR PARTICIPATION
10th Conference of Open Innovations Community FRUCT
Tampere, Finland, 7-11 November 2011

Overview

FRUCT is the largest regional cooperation framework between academia and industry in form of open innovations. FRUCT conferences are attended by the representatives of 20 FRUCT member universities from Russia, Finland, Denmark, Italy, Ukraine, industrial experts from Nokia, Nokia Siemens Networks, Intel and Symbian Foundation, and a number of guests from other companies and universities.

The conference is an R&D forum for the most active students, academic experts, industrial researchers and influential representatives of business and government. The conference invites the world-class academic and industrial researcher to give lectures on the most relevant topics, provides an opportunity for student teams to present progress and results of their R&D projects, meet new interesting people and form new R&D teams. The conference program consists of 3 to 5 intensive (½ or full day) trainings on the most promising technologies, plus 3 days of the main conference.

We warmly welcome all university research teams to participate in the conference, present your research and join the FRUCT Program. Thanks to our sponsors, all participants can enjoy free of charge registration to the event, but the online registration must be done by everyone before the conference.

Background and motivation

The distinctive feature of modern IT and Telecommunications industries is in dramatic shortening of the period when technology remains commercially viable. On the one hand, this is due to the competition between key market players that are pushing all manufacturers to accelerate innovations; on the other hand, this is due to technological progress speed up caused by the growing expansion of intellectual resource invested into R&D and design activities. This trend is an important call and challenge for the leading educational and research institutions around the globe. In the FRUCT we believe that it is crucial to combine forces of EU and Russia to follow up the competition in adopting university education to the new industrial trends. The first step is to strength a bridge between Russian and Finnish academic worlds, increase visibility of involved research teams and set direct personal contacts between academic and industrial experts. For more information about the FRUCT program please visit www.fruct.org.

Call for papers and presentations

We welcome you to submit full papers, presentation only publications and poster/demo proposals (have to be submitted as an abstract of min 150 words and max 2 pages) by **September 19, 2011**. The list of the conference focus topics is provided below (we welcome you to propose new challenging R&D topics):

- Open source solutions, development and maintenance of mobile OSS MeeGo
- Smart spaces, new use cases for well known devices, integration of peripherals
- Inter-device connectivity, embedded networks, hardware/software co-design
- Software and services for mobile devices, design of future applications and UIs
- Technology proofing, modeling, verification and validation, testing techniques
- Security for mobile devices, management of personal and business privacy
- Design and optimization of emerging wireless network technologies
- Mobile multimedia technologies and video services and solutions
- Energy management, new sources of energy, green technologies
- Modern network architectures, air interfaces and protocols
- Mobile-Health, Fitness and Medical mobile services

All conference papers and abstracts will be published in FRUCT proceeding, and selected papers will be sent to European academic journal. The paper templates, conference news and updates, information on accommodation and all other details can be found from web page: http://www.fruct.org/conference10.