

# Finnish-Russian University Cooperation Program in Telecommunications (FRUCT) seminar Saint-Petersburg, Russia

21 May

Room: 53-03

Chairman: Alexey Dudkov

<b>09:30</b>	30m	<b>Registration</b>
<b>10:00</b>	15m	<b>Official opening of the Seminar,</b> St. Petersburg Government, SUAI, Consulate of Finland
<b>10:15</b>	15m	<b>FRUCT program description and progress,</b> Sergey Balandin, Nokia
<b>10:30</b>	1,5h	<b>Symbian OS – Overview, possibilities and the community,</b> Andreas Jakl, Symbian Academy
<b>12:00</b>	1h	<b>Time for Lunch</b>
<b>13:00</b>	1h	<b>Net.beans environment,</b> Vadim V. Monakhov, Saint-Petersburg State University
<b>14:00</b>	1h	<b>Building location and context aware solutions on Nokia platforms,</b> Petro Soininen, Forum Nokia
<b>15:00</b>	15m	<b>Coffee-break</b>

## Coding section

Room: 53-03

Chairman: Andrey Ovchinnikov

## Symbian training

Room: 53-01

Trainer: Petro Soininen

<b>15:15</b>	1h	<b>A simple algorithm for decoding Reed-Solomon codes,</b> Sergey Fedorenko, SUAI	<b>15:15</b>	<b>Symbian hands-on session &amp; competition,</b> Petro Soininen (Forum Nokia), Andreas Jakl (Symbian Academy)
<b>16:15</b>	15m	<b>A method for fast estimation of convolutional code spectrum and its application to designing turbo codes for wireless standards,</b> Ilya Katsov, Olga Kapralova, Grigory Evseev, SUAI		
<b>16:30</b>	15m	<b>Near-optimal symbol mapping for MIMO systems with HARQ protocols,</b> Vladislav Chernyshev, SUAI		
<b>16:45</b>	15m	<b>MIMO Research in the University of Turku,</b> Jari Tissari, University of Turku		
<b>17:00</b>	15m	<b>Efficiency of block error correction scheme for chirp spread spectrum wireless link,</b> Anastasia Lavrenko, LETI		
<b>17:15</b>	15m	<b>Sparse Graph AL-FEC Solutions for IP Datacasting in DVB-H,</b> Kristian Nybom, Åbo Akademi University		
<b>18:00</b>	3h	<b>Social Event: Boat trip</b>		

09:45	15m	<b>Day Agenda</b> , Andrey Ovchinnikov, SUAI
10:00	15m	<b>WidSets in Russia</b> , Aleksey Koren, SUAI WidSets Lab
10:15	30m	<b>Cross-layer modeling of TCP performance over wireless channels with hybrid ARQ/FEC</b> , Roman Dunaytsev, Tampere University of Technology
10:45	15m	<b>Insertion of Courses on Embedded Systems in the Petrozavodsk State University Study Process</b> , Alexandr Borodin, Petrozavodsk State University
11:00	15m	<b>Semantic search in p2p networks (status report)</b> , Alexandra Afanaseva, Eugene Linsky, SUAI
11:15	30m	<b>Title OSS and Maemo: introduction, university cooperation, legal issues</b> , Timofey Turenko, Nokia
11:45	15m	<b>Open Source Linux Laboratory at LETI</b> , Kirill Krinkin, LETI
12:00	1h	<b>Time for Lunch</b>
13:00	15m	<b>OSS in Herzen university</b> , Dmitry Zolotov, Herzen university
13:15	30m	<b>Faculty of Mathematics of the Petrozavodsk State University: Overview and OSS courses</b> , Yury Bogoyavlenskiy, Petrozavodsk State University
13:45	15m	<b>Lexicon Viewer on Maemo platform</b> , Eugeny Smirnov, Herzen university
14:00	15m	<b>Open Source and Linux in Higher Education for Teachers Training</b> , Dmitry Zolotov, Herzen University
14:15	15m	<b>Endurance testing of Maemo (status report)</b> , Anton Dogadaev, Eugene Linsky, SUAI
14:30	15m	<b>Cooperation of IT-park of PetrSU with companies and industrial enterprises of Russia and Finland</b> , Anton Shabaev, Petrozavodsk State University
14:45	15m	<b>Modeling of Access network</b> , Vladimir Deart, Vladimir Mankov, Alex Pilugin, MTUCI
15:00	15m	<b>Coffee-break</b>

## Research & Development

Room: 53-01

Chairman: Andrey Ovchinnikov

15:15	15m	<b>Multiaccess Tree Algorithms with Interference Cancellation and Memory Restriction in Presence of Cancellation Errors</b> , Sergey Andreev, SUAI
15:30	45m	<b>Mesh networks</b> , Yevgeni Koucheryavy, Tampere University of Technology
16:15	15m	<b>Comparison and performance estimation of arithmetic coding algorithms</b> , Anton Veselov, Andrey Turlikov, SUAI
16:30	15m	<b>Analysis and Improvement of JPEG-LS algorithm</b> , Elena Malisheva, SUAI
16:45	15m	<b>Statistical modulation for low-complexity wireless video transmission</b> , Anton Sergeev, Anton Veselov, SUAI
17:00	30m	<b>Challenges of implementing wireless sensor networks for industrial applications</b> , Vesa Pentikäinen, VTT Technical Research Centre of Finland

## Technology (optional)

Room: 51-01

Trainer: Aleksey Koren

15:15	<b>WidSets hands-on session &amp; competition</b> , Aleksey Koren, Aleksandr Sidorenko
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<b>09:45</b>	15m	<b>Day Agenda</b> , Andrey Ovchinnikov, SUAI
<b>10:00</b>	1h	<b>Real-time in embedded systems</b> , Michel Gillet, Nokia
<b>11:00</b>	15m	<b>The Concept of ActionC – A Method for Formal Specification and Verification of Embedded Systems in SystemC</b> , Tomi Metsälä, University of Turku
<b>11:15</b>	15m	<b>Protocol Processor Enabled Secure Connections in Embedded Systems</b> , Jani Paakkulainen, University of Turku
<b>11:30</b>	15m	<b>SystemC Power Estimation Models (status report)</b> , Felix Shutenko, SUAI
<b>11:45</b>	15m	<b>Bluetooth Interference Detection for Multi-Radio Platform Optimization</b> , Alexander Kozlov, Eugeny Pustovalov, SUAI
<b>12:00</b>	1h	<b>Time for Lunch</b>
<b>13:00</b>	1,5h	<b>NGN/IMS deployment strategy in communication networks</b> , Andrey N. Terekhov, St. Petersburg State University
<b>14:30</b>	15m	<b>Adaptive power saving on receiver side in DVB-H system based on JPEG2000 standard</b> , Ann Ukhanova, SUAI
<b>14:45</b>	15m	<b>A Rate Control management in JPEG2000 for wireless video transmission</b> , Vladimir Bashun, SUAI
<b>15:00</b>	15m	<b>Extended YUV transform for efficient image compression</b> , Victor Minchenkov, Anton Sergeev, Andrey Turlikov, SUAI
<b>15:15</b>	15m	<b>Coffee-break</b>
<b>15:30</b>	15m	<b>OLPC Mesh Networking</b> , Arina Rudakova, LETI
<b>15:45</b>	15m	<b>OLPC Mesh-network improving</b> , Arina Rudakova, LETI
<b>16:00</b>	15m	<b>Status report of Jyväskylä</b> , Vitaliy Tykhomyrov, University of Jyväskylä
<b>16:15</b>	15m	<b>Diversity Reception in Microwave Links</b> , Yarina Duplica, LETI
<b>16:30</b>	1h	<b>The way to created a new services utilizing personal content for travelers</b> , Oleg Beletski, Nokia
<b>17:30</b>	30m	<b>Results of hands-on sessions</b> , Presentation of WidSets & Symbian mobile solutions <b>Voting</b> , Selecting the winner of the WidSets Contest
<b>18:00</b>	15m	<b>Official Closing of the Seminar</b>