

# Nokia Scholarships 2024

# **Milad Abolpour**

University of Oulu

Topic: Multi-User Information Retrieval in 6G Networks

Grant: 5 000 €

# Mohammadmahdi Asgari

Aalto University School of Electrical Engineering

Topic: Metasurfaces for Future Wireless Communications

Grant: 5 000 €

# Jan Bergman

Aalto University School of Electrical Engineering

Topic: Advancements in Antenna Arrays for Frequencies beyond 100 GHz

Grant: 5 000 €

#### **Dian Echevarria Perez**

University of Oulu

Topic: Intelligent Resource Allocation Mechanisms for Heterogeneous Networks under Strict QoS

Requirements Grant: 5 000 €

# **Boyu Fan**

University of Helsinki

Topic: Federated Learning in Heterogeneous Systems: From Internet of Things to Foundation Models

Grant: 5 000 €

# Kari Hepola

Tampere University

Topic: Automated Design Space Exploration of Application-Specific GPGPUs Using Machine Learning

Techniques Grant: 5 000 €

# **Pranay Jhunjhunwala**

Aalto University School of Electrical Engineering

Topic: Methods Improving Software Design Efficiency for Flexible Industrial Automation

Grant: 5 000 €

# Yue Jiang

Aalto University School of Electrical Engineering

Topic: Improving Human Capabilities with Intelligent User Interfaces

Grant: 5 000 €

#### Kianoosh Kazemi

University of Turku

Topic: Digital Health Monitoring: Leveraging Wearable Devices and Al Solutions for Maternity Care

Grant: 5 000 €

### Manila Kodali

Aalto University School of Electrical Engineering

Topic: Speech-based Biomarking of Human Health Using Deep Learning

Grant: 5 000 €

#### Aleksi Korsman

Aalto University School of Electrical Engineering

Topic: RISC-V-based Computing Platforms for Communications

Grant: 5 000 €

#### Vesa Lampu

Tampere University

Topic: Digital Self-Interference Cancellation Methods in 5G and Beyond STAR Systems

Grant: 5 000 €

### Topi Leppänen

Tampere University

Topic: Programming Abstractions for Configurable Heterogeneous Platforms

Grant: 5 000 €

#### Henrik Lievonen

Aalto University School of Science

Topic: Beyond LCL Problems in the LOCAL Model

Grant: 5 000 €

### **Yining Liu**

Aalto University School of Electrical Engineering

Topic: Inductive Wireless Power Transfer Systems with High Positional Freedom

Grant: 5 000 €

#### **Ananth Mahadevan**

University of Helsinki

Topic: Scaling and Maintaining Machine Learning Pipelines

# Dileepa Marasinghe

University of Oulu

Topic: Learning-Based Techniques for Enhancing Sub-THz Communications

Grant: 5 000 €

#### **Eloi Moliner**

Aalto University School of Electrical Engineering Topic: Generative Models for Audio Restoration

Grant: 5 000 €

#### Zinelaabidine Nadir

Aalto University School of Electrical Engineering

Topic: On Supporting Immersive Services in 5G and Beyond Mobile Systems

Grant: 5 000 €

### **Fedor Nigmatulin**

Aalto University School of Electrical Engineering

Topic: Low-dimensional Nanostructures for Computing and Communications Technology

Grant: 5 000 €

### Riikka Numminen

University of Turku

Topic: Studies in Data Science Method Development

Grant: 5 000 €

# **Pouyan Rezapoor**

Aalto University School of Electrical Engineering

Topic: Millimeter-Wave Imaging with Optimized Galvanometer Scanning System with Telecentric

Configuration Grant: 5 000 €

#### Kimmo Riihiaho

University of Jyväskylä

Topic: Hyperspectral Simulation of Photosynthesizing Organisms

Grant: 5 000 €

# **David Ernesto Ruiz Guirola**

University of Oulu

Topic: Edge Intelligence for Low-power IoT Connectivity and Operation

Grant: 5 000 €

# Kaisa Ryynänen

Aalto University School of Electrical Engineering

Topic: Integrated mm-Wave Receiver Front-ends for Communications and Sensing

Grant: 5 000 €

### Ossi Räisä

University of Helsinki

Topic: Multiple Differentially Private Synthetic Datasets for Machine Learning and Statistics

# Saeid Sadeghi Vilni

University of Oulu

Topic: Status Update Control and Analysis for Information Freshness and Semantic Communications

Grant: 5 000 €

#### **Joose Sainio**

Tampere University

Topic: Enabling Practical VVC Intra Encoding

Grant: 5 000 €

#### **Albert Salmi**

Aalto University School of Electrical Engineering

Topic: Computational Methods for Multi-feed Antenna Analysis and Design

Grant: 5 000 €

#### **Nassim Sehad**

Aalto University School of Electrical Engineering

Topic: Novel Human-Computer Interaction: Paving the Way towards the Internet of Senses through

6G

Grant: 5 000 €

### **Negar Shabanzadeh**

University of Oulu

Topic: Developing Analysis Tools and Methods for Power Efficient Minimization of Nonlinear

Distortion in Radio Circuits

Grant: 5 000 €

### Ville Tanskanen

University of Helsinki

Topic: Latent Signals and Modelling Human Behavior

Grant: 5 000 €

#### **Einari Vaaras**

Tampere University

Topic: Efficient Annotation Methods for Clinical Time-series Data Using Self-supervised and Active

Learning

Grant: 5 000 €

#### **Prakhar Verma**

Aalto University School of Science

Topic: Leveraging Approximate Inference Techniques in Deep Learning

Grant: 5 000 €

### **Yogesh Verma**

Aalto University School of Science

Topic: Physics-inspired Deep Representation Learning

Grant: 5 000 €

# Sravan Kumar Reddy Vuyyuru

Aalto University School of Electrical Engineering

Topic: Design and Modeling of Electromagnetics-consistent Reconfigurable Intelligent Surfaces in

**Next-Generation Wireless Networks** 

Grant: 5 000 €

### **Boxuan Xie**

Aalto University School of Electrical Engineering

Topic: Backscatter Communication Enabled Sustainable Ambient Internet of Things Solutions

Grant: 5 000 €

# **Bing Xue**

Aalto University School of Electrical Engineering

Topic: Over-The-Air Antenna Test Methods in Future Wireless Systems

Grant: 5 000 €

#### Nikita Zeulin

Tampere University

Topic: Machine Learning-Based Heterogeneity-Aware Beam Management

Grant: 5 000 €

# Wenjun Zhang

University of Helsinki

Topic: Privacy-Preserving and Communication-Efficient Federated Learning for Heterogeneous Data

in Urban Opportunistic Crowdsensing

Grant: 5 000 €

# Nokia Scholarships 2023

### **Gizem Akman**

University of Helsinki

Topic: Privacy and Mobility Aspects in Authentication and Key Agreement Protocols

Grant: 5 000 €

### **Shamsul Al Mahmud**

Aalto University School of Electrical Engineering

Topic: Towards Free-positioning Self-adaptive Wireless Power Transfer Systems

Grant: 5 000 €

### **Mohammad Azangoo**

Aalto University School of Electrical Engineering

Topic: Automatic Generation of Digital Twins to Accelerate Digitization and Transform Brownfield

Process Systems into Industry 4.0-Compliant Digital Plants

Grant: 5 000 €

#### **Waleed Bin Qaim**

Tampere University

Topic: Edge-assisted Task Offloading in the Internet of Wearable Things

#### **David Blanco Mulero**

Aalto University School of Electrical Engineering

Topic: Towards Efficient Robotic Manipulation of Deformable Objects by Learning Representations

and Adaptive Policies

Grant: 5 000 €

# **Paul Chang**

Aalto University School of Science

Topic: Dual Parametrization for Approximate Inference

Grant: 4 500 €

#### **Patrick Coe**

Tampere University

Topic: Exploration of High Definition and Volumetric Haptics

Grant: 5 000 €

#### Ricardo Falcon Perez

Aalto University School of Electrical Engineering

Topic: Deep-learning Methods for Spatial Audio and Room Acoustics

Grant: 5 000 €

### Leonardo Fierro

Aalto University School of Electrical Engineering

Topic: Transient Processing for Audio Applications

Grant: 5 000 €

#### **Yaroslav Getman**

Aalto University School of Electrical Engineering

Topic: Self-supervised Learning in Speech Tasks

Grant: 5 000 €

#### Reetta Ghezzi

University of Jyväskylä

Topic: Analyzing Best Practices and Viabilities in Public ICT Procurement

Grant: 5 000 €

### Pedro Emilio Gória Silva

**LUT University** 

Topic: Semantic-Functional Communications in Cyber-Physical Systems

Grant: 5 000 €

# **Christoph Hold**

Aalto University School of Electrical Engineering

Topic: Parametric Spatial Audio Compression Codec for Higher-Order Ambisonics

Grant: 5 000 €

#### Md. Ziaul Hoque

University of Oulu

Topic: Staining Resilient Algorithms for Cancer Image Analysis in Digital Pathology

# Mostafa Jafari Nokandi

University of Oulu

Topic: Analysis, Design, and Implementation of Nonlinear Circuits for THz ICs

Grant: 5 000 €

### **Farhad Javanmardi**

Aalto University School of Electrical Engineering

Topic: Improving the Performance of Automatic Pathological Speech Assessment System Using

Advanced Deep Learning Methods

Grant: 5 000 €

# Saba Kheirinejad

University of Oulu

Topic: Mobile Health (mHealth) for Self-Management

Grant: 5 000 €

#### **Mounssif Krouka**

University of Oulu

Topic: Communication-Efficient Wireless Algorithms and Systems for Edge Artificial Intelligence

Grant: 5 000 €

# **Joel Mooses Lamberg**

Aalto University School of Electrical Engineering

Topic: Cornea Spectroscopy with Metaoptical Terahertz System

Grant: 5 000 €

# **Rustam Latypov**

Aalto University School of Science

Topic: Massively Parallel Graph Algorithms

Grant: 5 000 €

### Mengyuan Ma

University of Oulu

Topic: Energy-Efficient Transceiver Designs in Terahertz Communications

Grant: 5 000 €

### Mikko Majamaa

University of Jyväskylä

Topic: Enhancing the Performance of Beyond 5G Non-Terrestrial Networks

Grant: 5 000 €

# **Abanoub Mamdouh Girgis Pipaoy**

University of Oulu

Topic: Communication and Control Co-design for Beyond 5G Networks

Grant: 5 000 €

### **Leatile Marata**

University of Oulu

Topic: Advanced Signal Processing Techniques for Machine Type Communications

### **Mehari Meles**

Aalto University School of Electrical Engineering
Topic: GPS Denied Drone Localization and Tracking

Grant: 5 000 €

# Nils Meyer-Kahlen

Aalto University School of Electrical Engineering

Topic: Transfer-Plausible Acoustics for Augmented Reality Telepresence

Grant: 5 000 €

# **Katherine Mimnaugh**

University of Oulu

Topic: Perceptually Optimized Motion Planning for Immersive Robotic Telepresence

Grant: 2 500 €

#### Parisa Movahedi

University of Turku

Topic: Privacy-preserving AI for Synthetic and Anonymous Health Data. Case study: Differentially

Private Synthetic Data Generation

Grant: 5 000 €

### Petri Niemelä

Aalto University School of Electrical Engineering

Topic: Reliability Solutions for Future Nanosatellites

Grant: 5 000 €

# Laura Piispanen

Aalto University School of Science

Topic: Quantum Physics Through Interactive Art

Grant: 5 000 €

#### Salma Salimi

University of Turku

Topic: Trustable Collaborative Multi-robot Systems with Distributed Ledger Technology

Grant: 5 000 €

#### Javad Shabanpour

Aalto University School of Electrical Engineering

Topic: Multi-Function Reconfigurable Intelligent Surface Structures for Wireless Networks

Grant: 5 000 €

#### **Aditi Site**

Tampere University

Topic: Analysis and Processing of Digital Health Data from Sensors/Wearables Using Machine

Learning Algorithms

Grant: 5 000 €

### **Thushan Sivalingam**

University of Oulu

Topic: Learning-based Efficient and Fast Access Methods for Beyond-5G Wireless Communications

# Paola Cecilia Torrico Morón

University of Turku

Topic: UWB-Based Mesh Connectivity and Collaborative Localization for Large-Scale Heterogeneous

Multi-Robot Systems

Grant: 5 000 €

### **Mohammad Hassan Vali**

Aalto University School of Electrical Engineering

Topic: Methods Combining Machine Learning and Vector Quantization, with Application to Speech

Processing Grant: 5 000 €

### Panu Viitaharju

Aalto University School of Chemical Engineering

Topic: Virtual Reality Laboratory Education in Chemical Engineering

Grant: 5 000 €

### **Gautam Vishwanath**

Aalto University School of Art, Design and Architecture

Topic: G

Grant: 5 000 €

# **Nisita Weerasinghe**

University of Oulu

Topic: Blockchain-Enabled Service Level Agreement (SLA) Management for Enhanced Trust and

Transparency in 5G Network Slicing

Grant: 5 000 €

### **Anastasia Yastrebova-Castillo**

University of Oulu

Topic: LEO Satellite Constellations for Autonomous System Operation in the Arctic Region: Situational

Awareness and Communication Aspects

Grant: 3 000 €

# Xianjia Yu

University of Turku

Topic: Advancing Security and Intelligence in Collaborative Wireless Multi-Agent Systems via

Federated Learning Enhanced Multi-Modal Sensing

Grant: 5 000 €

# 2022

#### Elham Abolfazli

Aalto University School of Electrical Engineering

Topic: Control Synthesis in Wireless Networked Control Systems With Application to Vehicle

Platooning Affected by Communication Impairments

Grant: 5 000 €

#### **Mohsen Amidzade**

Aalto University School of Electrical Engineering

Topic: Collaborative Caching for Wireless Energy Efficiency Networks

Grant: 3 000 €

#### **Muhammad Asad Ullah**

University of Oulu

Topic: Machine-Type Connectivity Over Satellite and Non-Terrestrial Networks for Remote Areas

Grant: 5 000 €

# Mariangela Baggio

Aalto University School of Electrical Engineering

Topic: Development of THz and Millimeter Wave Techniques for the Early Detection of Corneal

Disease

Grant: 5 000 €

# **Martino Ciaperoni**

Aalto University School of Science

Topic: Machine Learning Meets Database Management

Grant: 5 000 €

### Xiaoqi Cui

Aalto University School of Electrical Engineering

Topic: Ultra-Miniaturised On-Chip Spectrometers via a Semiconducting Single-Junction

Grant: 5 000 €

### **Yongchao Dang**

Aalto University School of Electrical Engineering

Topic: Machine Learning-Based GPS Spoofing Detection for Cellular-Connected UAVs

Grant: 5 000 €

### **Endrit Dosti**

Aalto University School of Electrical Engineering

Topic: Efficient Optimization Algorithms for Data Analysis

Grant: 5 000 €

#### **Oussama El Marai**

Aalto University School of Electrical Engineering

Topic: Improving Live Video Streaming in 5G Networks

Grant: 5 000 €

### **Eslam Eldeeb**

University of Oulu

Topic: Machine Learning for Future Machine-Type Communications

Grant: 4 000 €

### **Mahmoud Elsanhoury**

University of Vaasa

Topic: Towards Precision Positioning for Smart Logistics Using Fusion-Based Ultra Wideband and

MIMO-Assisted LEO Satellites Technologies

Grant: 5 000 €

# **Eugene Frimpong**

Tampere University

Topic: Lightweight Cryptography and Privacy in IoT, Mist, and Fog Ecosystem

Grant: 5 000 €

#### Mikhail Ganzhinov

Aalto University School of Electrical Engineering

Topic: Few-Angular Line-Systems

Grant: 3 000 €

# Topi Halme

Aalto University School of Electrical Engineering

Topic: Sequential and Spatial Inference and Learning in Large-Scale Sensor Networks

Grant: 5 000 €

# Ramin Hashemi

University of Oulu

Topic: Reconfigurable Intelligent Surface in URLLC Wireless Systems

Grant: 5 000 €

# Eric Hyyppä

Aalto University School of Science

Topic: Elements of Superconducting Quantum Computers

Grant: 5 000 €

# **Lucie Klus**

Tampere University

Topic: From Compression of Wearable-Based Data to Effortless Indoor Positioning

Grant: 4851 €

#### **Daniel Krause**

Tampere University

Topic: Spatial Audio for Complex Acoustic Scene Analysis

Grant: 5 000 €

#### Mikko Laakso

Aalto University School of Electrical Engineering

Topic: Mitigating the LED Nonlinearity in Visible Light Communication for High PAPR Modulation

Grant: 5 000 €

### Yushan Siriwardhana

University of Oulu

Topic: Robust and Resilient Distributed Al-Based Intrusion Detection for 5G and Beyond Networks

Grant: 5 000 €

# Yang Liu

University of Helsinki

Topic: Repurposing Pre-trained Models for Robust Knowledge Extraction and Interactive Exploration

#### **Pedro Llado Gonzalez**

Aalto University School of Electrical Engineering

Topic: The Effect of Altered Spatial Cues on Sound Source Localisation

Grant: 5 000 €

# **Arpit Merchant**

University of Helsinki

Topic: Applications of Node Embeddings to Learning and Mining on Graphs

Grant: 5 000 €

# Seyed Ehsan Moeen Taghavi

University of Oulu

Topic: Joint Active-Passive Beamforming and User Association in IRS-Assisted mmWave Cellular

Networks Grant: 5 000 €

# **Usman Muhammad**

University of Oulu

Topic: Video Representation and Deep Learning Techniques for Face Presentation Attack Detection

Grant: 5 000 €

#### **Fahri Wisnu Murti**

University of Oulu

Topic: Open and Virtualized Radio Access Network Orchestration With Deep Reinforcement Learning

Grant: 5 000 €

#### **Aiman Nait Abbou**

Aalto University School of Electrical Engineering

Topic: Introducing SDN-Based Solutions for Deterministic Services

Grant: 5 000 €

#### **Alexander Nikitin**

Aalto University School of Science

Topic: Probabilistic Methods for Predictive Maintenance: Graph and Human-in-the-Loop Machine

Learning

Grant: 5 000 €

# Malalgodage Amila Ni Perera

University of Oulu

Topic: Developing and Implementing the Light-Based IoT Concept Using Sustainable Electronic

Technologies Grant: 5 000 €

### Samu-Ville Pälli

Aalto University School of Electrical Engineering

Topic: Submillimeter-Wave Imaging With Frequency-Diverse Holograms Using Neural Networks

Grant: 5 000 €

# Anna-Maria Raita-Hakola

University of Jyväskylä

Topic: From Sensors to Machine Vision Systems: Exploring Machine Vision, Computer Vision and

Machine Learning With Hyperspectral Imaging Applications

Grant: 5 000 €

#### Siddharth Ramchandran

Aalto University School of Science

Topic: Unsupervised Deep Generative Modelling of Clinical Data for Personalised Medicine

Grant: 5 000 €

# **Ankit Regmi**

University of Oulu

Topic: Development of Low-Cost GNSS-Reflectometry Sensor for Environment Remote Sensing

Grant: 5 000 €

#### **Dariush Salami**

Aalto University School of Electrical Engineering

Topic: Spectrum-Efficient Human-Centric Sensing Using mmWave FMCW Radars

Grant: 5 000 €

# **Maria Stratigi**

Tampere University

Topic: Sequential Group Recommendations

Grant: 5 000 €

# **Sebastian Szyller**

Aalto University School of Science

Topic: Ownership and Confidentiality in Machine Learning Systems

Grant: 3 000 €

#### Harri Varheenmaa

Aalto University School of Electrical Engineering

Topic: Advanced Antennas for Mobile Devices

Grant: 5 000 €

#### Lauri Vähä-Savo

Aalto University School of Electrical Engineering

Topic: Microwave Circuits and Technics for Modern Low-Energy Buildings

Grant: 5 000 €

# **Alec Wright**

Aalto University School of Electrical Engineering

Topic: Deep Learning for Audio Effects Processing

Grant: 5 000 €

#### Yanxin Xi

University of Helsinki

Topic: Urban Computing on Satellite and Street-View Imagery With Computer Vision Techniques

Grant: 5 000 €

## **Hanning Zhao**

Tampere University

Topic: Novel Dynamic Visualization Methods for Cybersecurity Management of IoT Devices and

Networks Grant: 5 000 €

# Lingyu Zhu

Tampere University

Topic: Scene Perception Through Audio-Visual Learning

Grant: 5 000 €

# 2021

### **Muharrem Mete Ahishali**

Tampere University

Topic: Advanced Machine Learning Techniques for Scarce Data

Grant: 6 000 €

# Somayyeh Asgari

University of Oulu

Topic: Analytic and Numeric Studies of Tunable Reconfigurable Graphene-based Optical

Metamaterials at Terahertz Telecommunication

Grant: 5 000 €

### **Nooshin Bahador**

University of Oulu

Topic: Assessment of Neurological Function Based on Physiological Signals Processing Using

Machine/Deep Learning Techniques

Grant: 5 000 €

#### **Alexandros Bakas**

Tampere University

Topic: Operations on Encrypted Data

Grant: 6 000 €

### Hamidreza Bakhshzad Mahmoodi

University of Oulu

Topic: Coded Collaborative Caching for Wireless Energy Efficiency

Grant: 5 000 €

# **Woubshet Behutiye**

University of Oulu

Topic: Towards a Better Understanding and Support of Quality Requirement Documentation in Agile

Software Development

Grant: 5 000 €

### **Rodrigo Borges**

Tampere University

Topic: Machine Learning Techniques for Mitigating Unfairness in Recommendation Systems

# Kateryna Chumachenko

Tampere University

Topic: Discriminant Learning with Applications to Deep Learning

Grant: 6 000 €

# Aysen Degerli Ahishali

Tampere University

Topic: Artificial Intelligence for Advance Warning of Myocardial Infarction and COVID-19

Grant: 6 000 €

# Ignacio Maria Delgado Lozano

Tampere University

Topic: SCARY: Side-Channel Attacks and Countermeasures for an Improved Hardware Cryptography

Grant: 6 000 €

# **Hamza Djelouat**

University of Oulu

Topic: Grant-Free Access Optimization in Massive Machine-Type Communications

Grant: 5 000 €

# Luca Ferranti

University of Vaasa

Topic: Computational Methods for Efficient and Reliable Positioning

Grant: 6 000 €

# Dipa Ghindani

Tampere University

Topic: Active Metasurface-based Nanophotonic Devices for Optical Communication

Grant: 6 000 €

# **Bikshapathi Gouda**

University of Oulu

Topic: Low-Complexity Fully Distributed Cell-Free Massive MIMO System Design

Grant: 6 000 €

#### **Georg Götz**

Aalto University School of Electrical Engineering

Topic: Machine-learning-based Virtual Acoustics Rendering

Grant: 6 000 €

### **Mohammad Hatami**

University of Oulu

Topic: Machine Learning Methods for Next Generation Wireless IoT Networks

Grant: 5 000 €

# Reza Heydarian

Aalto University School of Electrical Engineering

Topic: Dielectric Particles for Enhancement of Nanophotonic Devices

Grant: 6 000 €

#### **Md Arman Hossain**

Tampere University

Topic: Teaching and Learning of Information and Communication Technology (ICT) and Information

Literacy (IL) Skills in Library and Information Science (LIS) Schools

Grant: 6 000 €

# **Muhammad Yasir Javed**

University of Oulu

Topic: Interference Robust RF Transceivers for mmW and beyond

Grant: 5 000 €

# **Shaoxiong Ji**

Aalto University School of Science

Topic: Deep Learning for Natural Language Processing and Medical Applications

Grant: 5 000 €

### **Tanveer Khan**

Tampere University

Topic: Privacy-preserving Machine Learning Models

Grant: 6 000 €

#### **Roman Klus**

Tampere University

Topic: Applications of Modern Machine Learning Methods in Future Radio Networks

Grant: 4 900 €

### Mikko Kokkonen

University of Oulu

Topic: Novel Materials and Lens Structures for sub-THz Range Lens Antennas for Fixed and Steerable

Beams Antenna Systems

Grant: 6 000 €

#### **Abhishek Kumar**

University of Helsinki

Topic: User-centered Systems for Privacy Protection in Mobile and Pervasive Environments

Grant: 6 000 €

# **Karem Melissa Lozano Montero**

Tampere University

Topic: Low-cost Energy Harvesters and Energy-efficient Sensors for IoT Applications

Grant: 5 000 €

### **Ruben Morales Ferre**

Tampere University

Topic: MEO and LEO Satellite-based Positioning in the Presence of Wireless Channel Impairements

and Interference Management Solutions

Grant: 6 000 €

### Irfan Muhammad

University of Oulu

Topic: Dependability for Future Wireless Machine Type Communication Networks

# Suhas Thejaswi Muniyappa

Aalto University School of Science

Topic: Scalable Algorithm Designs for Web-scale Data

Grant: 6 000 €

# Tri Nguyen

University of Oulu

Topic: Blockchain Technology for a Service Market

Grant: 6 000 €

### **Behnaz Norouzi**

University of Oulu

Topic: The Intergenerational Aspect of Shaping Children's Learning in Digital Fabrication Activities

Grant: 2 000 €

### Niloofar Okati

Tampere University

Topic: Performance Analysis of Massive Low Earth Orbit Internet Constellations

Grant: 6 000 €

### **Jude Okwuibe**

University of Oulu

Topic: Software-Defined Resource Management for Industrial Internet of Things

Grant: 6 000 €

# **Kennedy Opoku Asare**

University of Oulu

Topic: Smartphone & Wearable Instrumentation and Human Behaviour Analysis for Depression

Interventions Grant: 5 000 €

### Jaakko Pihlajasalo

Tampere University

Topic: Machine Learning Assisted Algorithms for Industry Applications

Grant: 6 000 €

### **Karolina Prawda**

Aalto University School of Electrical Engineering

Topic: Capture, Analysis, and Synthesis of Sound Energy Decay

Grant: 6 000 €

# Karel Pärlin

Tampere University

Topic: Physical Layer Security in Wireless Communications

Grant: 6 000 €

### Ali Raza Saleem

Aalto University School of Electrical Engineering

Topic: Integrated RF Transmitter Front-End for Frequency Reconfigurable Antenna Cluster

# **Sumit Singh**

University of Oulu

Topic: Design and Development of Radio Receiver ICs at sub-mmWave/THz Frequency Range

Towards 6G Communications

Grant: 6 000 €

#### **Islam Tanash**

Tampere University

Topic: Mathematical Tools for Communication Systems' Performance Analysis

Grant: 6 000 €

#### **Dat Thanh Tran**

Tampere University

Topic: Efficient Design, Training and Deployment of Artificial Neural Networks

Grant: 6 000 €

# **Agustin Zuniga**

University of Helsinki

Topic: Intelligent Pervasive Sensing

Grant: 6 000 €

# 2020

### **Mohamed Abdelaziz**

Topic: Ultra-reliable Low-Latency Vehicular Communication

Grant: 5 000 €

### Raju Ahamed

Topic: Millimeter-wave RF Front-end Circuits for 5G and Beyond Wireless Communications

Grant: 5 000 €

#### **Tanwir Ahmad**

Topic: Performance exploration and testing of software-intensive systems

Grant: 5 000 €

### **Igrar Ahmed**

Topic: Exploiting the role of optical wireless communication in medical ICT

Grant: 5 000 €

#### **Ihtisham Ali**

Topic: Visual-SLAM for autonomous vehicles in unregulated dynamic environment

Grant: 5 000 €

### **Nachiket Ayir**

Topic: Designing optimal waveforms and developing a test-bed for simultaneous wireless information

and power transfer

### Yazan A. M. Barhoush

Topic: Towards an articulated rehabilitation in VR: Improving arm tracking using a novel module

Grant: 4 920 €

# **Jiangcheng Chen**

Topic: Wideband millimeter wave and THz antenna design for high data rate 5G and 6G

communication systems

Grant: 3 500 €

#### Francisco Cuesta

Topic: Control of Electromagnetic Waves based on Metamaterials

Grant: 5 000 €

#### **Sneha Das**

Topic: Speech and Audio Enhancement for Coding in Multi-microphone Ad-hoc Networks

Grant: 5 000 €

### **Pekka Enberg**

Topic: The Parakernel Operating System

Grant: 5 000 €

# Majdoddin Esfandiari

Topic: Array processing aided mmWave channel estimation

Grant: 5 000 €

# **Tahmoores Farjam**

Topic: Co-Design of Control and Communication Protocols in Wireless Networked Control Systems

Grant: 5 000 €

### Jaakko Matias Haarla

Topic: Beam steerable antenna arrays for mobile networks

Grant: 5 000 €

#### **Ibbad Hafeez**

Topic: Securing the Internet-of-Things in edge-networks

Grant: 5 000 €

#### Mikko Heikkilä

Topic: Advances in privacy preserving machine learning

Grant: 5 000 €

### **Tharaka Hewa**

Topic: Decentralized and Scalable Blockchain based Security Service Architecture for 5G IoT

Grant: 5 000 €

#### Gazi Karam Illahi

Topic: Quality of Experience (QoE) improvement in Distributed Multimedia Systems

Grant: 5 000 €

#### **Asad Javed**

Topic: Scalable and Fault-Tolerant IoT Architecture for Smart City Environments

### **Emre Can Kaya**

Topic: Immersive Visual Data Compression

Grant: 5 000 €

### **Bilal Khan**

Topic: Robust and Simplified Digital Predistortion Solutions for Millimeter-Wave Multi-Antenna

Transmitters Grant: 5 000 €

# Vladislav Khayrudinov

Topic: Semiconductor nanowires in telecommunications: all-optical computing

Grant: 5 000 €

#### **Duc Le**

Topic: Robust and versatile antenna and RF technology for energy-efficient implantable and wearable

devices in body area networks

Grant: 5 000 €

#### Mikko Leino

Topic: Semiconductor nanowires in telecommunications: all-optical computing using nanowires

Grant: 5 000 €

# **Tong Li**

Topic: Robust and versatile antenna and RF technology for energy-efficient implantable and wearable devices in body area

networks

Grant: 5 000 €

#### Krista Longi

Topic: Beam-steerable Antennas at Millimeter-wave Frequencies

Grant: 5 000 €

### Yi Lu

Topic: Behavioral Pattern Recognition in Mobile Big Data

Grant: 5 000 €

# **Mohammad Moltafet**

Topic: Machine learning methods for signal processing

Grant: 5 000 €

### **Emadaldin Mozafari Majd**

Topic: Millimeter Wave Positioning and Location-Aware Communications for 5G-Empowered

Industrial IoT Grant: 5 000 €

#### Parisa Nouri

Topic: Cooperative Diversity Mechanisms for Critical Machine-Type Communications

Grant: 5 000 €

#### **Jonas Oppenlaender**

Topic: Harvesting Folk Theories for a Better Understanding of Human-Al Interaction

### Jorge Peña Queralta

Topic: Collaboration in Heterogeneous Multi-Robot Systems with Blockchain Technology and Edge

Computing Grant: 5 000 €

#### **Cesar Pereida Garcia**

Topic: Cryptography Engineering and Side-Channel Analysis

Grant: 4 350 €

### Jere Rusanen

Topic: Integrated Millimeter-Wave Power Amplifier Architectures for 5G

Grant: 5 000 €

# Nyyti Saarimäki

Topic: Towards mitigating code technical debt using automated static analysis tools

Grant: 5 000 €

# **Elham Shamsa**

Topic: Self-Aware Resource Management in Embedded Systems: from Resource Allocation to Quality

Configuration Grant: 5 000 €

#### Masoud Sharifian Mazraehmollaei

Topic: Metamaterials for controlling the near fields of short-wave electromagnetic sources

Grant: 5 000 €

#### **Hamid Shiri**

Topic: Machine Learning Aided Wireless Autonomous Control

Grant: 5 000 €

### Panu Sjövall

Topic: Research of High-Level Synthesis by Using it to Implement Kvazaar HEVC Video Encoder on

**FPGA** 

Grant: 5 000 €

#### **Fahad Sohrab**

Topic: Subspace learning for one-class classification

Grant: 5 000 €

#### Arthur Sousa de Sena

Topic: Enhancing Spectral and Energy Efficiency of Future Multi-Antenna Wireless Communication

Systems via Intelligent

Reflecting Surfaces and Advanced Multiple Access Technologies

Grant: 5 000 €

#### **Nikita Tafintsev**

Topic: Integrated Access and Backhaul in 5G systems

Grant: 5 000 €

#### Petri Vähäkainu

Topic: Artificial Intelligence -supported Security in Cyber- physical Environment in Smart Buildings

Context

Grant: 5 000 €

#### Dianlei Xu

Topic: Intelligent and privacy-preserving task migration strategy in edge computing

Grant: 5 000 €

### **Jawad Yasin**

Topic: Collision Prediction and avoidance in a swarm of drones

Grant: 5 000 €

### Sorrachai Yingchareonthawornchai

Topic: Fast and Scalable Algorithms for Computing Vertex Connectivity

Grant: 5 000 €

# **Narges Yousefnezhad**

Topic: Probabilistic Machine Learning Based Context Aware Security for Internet of Things

Grant: 5 000 €

# 2019

### **Mohamed Abdelaziz**

Topic: Ultra-reliable Low-Latency Vehicular Communication

Grant: 5 000 €

### Raju Ahamed

Topic: Millimeter-wave RF Front-end Circuits for 5G and Beyond Wireless Communications

Grant: 5 000 €

### **Tanwir Ahmad**

Topic: Performance exploration and testing of software-intensive systems

Grant: 5 000 €

# **Igrar Ahmed**

Topic: Exploiting the role of optical wireless communication in medical ICT

Grant: 5 000 €

#### **Ihtisham Ali**

Topic: Visual-SLAM for autonomous vehicles in unregulated dynamic environment

Grant: 5 000 €

# **Nachiket Ayir**

Topic: Designing optimal waveforms and developing a test-bed for simultaneous wireless information

and power transfer

Grant: 5 000 €

#### Yazan A. M. Barhoush

Topic: Towards an articulated rehabilitation in VR: Improving arm tracking using a novel module

Grant: 4 920 €

# **Jiangcheng Chen**

Topic: Wideband millimeter wave and THz antenna design for high data rate 5G and 6G

communication systems

Grant: 3 500 €

#### Francisco Cuesta

Topic: Control of Electromagnetic Waves based on Metamaterials

Grant: 5 000 €

### **Sneha Das**

Topic: Speech and Audio Enhancement for Coding in Multi-microphone Ad-hoc Networks

Grant: 5 000 €

# **Pekka Enberg**

Topic: The Parakernel Operating System

Grant: 5 000 €

# Majdoddin Esfandiari

Topic: Array processing aided mmWave channel estimation

Grant: 5 000 €

# **Tahmoores Farjam**

Topic: Co-Design of Control and Communication Protocols in Wireless Networked Control Systems

Grant: 5 000 €

#### **Jaakko Matias Haarla**

Topic: Beam steerable antenna arrays for mobile networks

Grant: 5 000 €

### **Ibbad Hafeez**

Topic: Securing the Internet-of-Things in edge-networks

Grant: 5 000 €

### Mikko Heikkilä

Topic: Advances in privacy preserving machine learning

Grant: 5 000 €

# **Tharaka Hewa**

Topic: Decentralized and Scalable Blockchain based Security Service Architecture for 5G IoT

Grant: 5 000 €

# Gazi Karam Illahi

Topic: Quality of Experience (QoE) improvement in Distributed Multimedia Systems

Grant: 5 000 €

### **Asad Javed**

Topic: Scalable and Fault-Tolerant IoT Architecture for Smart City Environments

Grant: 5 000 €

# **Emre Can Kaya**

Topic: Immersive Visual Data Compression

Grant: 5 000 €

#### **Bilal Khan**

Topic: Robust and Simplified Digital Predistortion Solutions for Millimeter-Wave Multi-Antenna

Transmitters Grant: 5 000 €

# Vladislav Khayrudinov

Topic: Semiconductor nanowires in telecommunications: all-optical computing

Grant: 5 000 €

#### **Duc Le**

Topic: Robust and versatile antenna and RF technology for energy-efficient implantable and wearable

devices in body area networks

Grant: 5 000 €

#### Mikko Leino

Topic: Semiconductor nanowires in telecommunications: all-optical computing using nanowires

Grant: 5 000 €

### Tong Li

Topic: Robust and versatile antenna and RF technology for energy-efficient implantable and wearable

devices in body area networks

Grant: 5 000 €

# Krista Longi

Topic: Beam-steerable Antennas at Millimeter-wave Frequencies

Grant: 5 000 €

### Yi Lu

Topic: Behavioral Pattern Recognition in Mobile Big Data

Grant: 5 000 €

#### **Mohammad Moltafet**

Topic: Machine learning methods for signal processing

Grant: 5 000 €

### **Emadaldin Mozafari Majd**

Topic: Millimeter Wave Positioning and Location-Aware Communications for 5G-Empowered

Industrial IoT Grant: 5 000 €

#### **Parisa Nouri**

Topic: Cooperative Diversity Mechanisms for Critical Machine-Type Communications

Grant: 5 000 €

### **Jonas Oppenlaender**

Topic: Harvesting Folk Theories for a Better Understanding of Human-Al Interaction

Grant: 5 000 €

### Jorge Peña Queralta

Topic: Collaboration in Heterogeneous Multi-Robot Systems with Blockchain Technology and Edge

Computing Grant: 5 000 €

#### Cesar Pereida Garcia

Topic: Cryptography Engineering and Side-Channel Analysis

Grant: 4 350 €

#### Jere Rusanen

Topic: Integrated Millimeter-Wave Power Amplifier Architectures for 5G

Grant: 5 000 €

# Nyyti Saarimäki

Topic: Towards mitigating code technical debt using automated static analysis tools

Grant: 5 000 €

### **Elham Shamsa**

Topic: Self-Aware Resource Management in Embedded Systems: from Resource Allocation to Quality

Configuration Grant: 5 000 €

# **Masoud Sharifian Mazraehmollaei**

Topic: Metamaterials for controlling the near fields of short-wave electromagnetic sources

Grant: 5 000 €

### **Hamid Shiri**

Topic: Machine Learning Aided Wireless Autonomous Control

Grant: 5 000 €

### Panu Sjövall

Topic: Research of High-Level Synthesis by Using it to Implement Kvazaar HEVC Video Encoder on

**FPGA** 

Grant: 5 000 €

#### **Fahad Sohrab**

Topic: Subspace learning for one-class classification

Grant: 5 000 €

#### Arthur Sousa de Sena

Topic: Enhancing Spectral and Energy Efficiency of Future Multi-Antenna Wireless Communication

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#### Petri Vähäkainu

Topic: Artificial Intelligence -supported Security in Cyber- physical Environment in Smart Buildings

Context

#### Dianlei Xu

Topic: Intelligent and privacy-preserving task migration strategy in edge computing

Grant: 5 000 €

# **Jawad Yasin**

Topic: Collision Prediction and avoidance in a swarm of drones

Grant: 5 000 €

# Sorrachai Yingchareonthawornchai

Topic: Fast and Scalable Algorithms for Computing Vertex Connectivity

Grant: 5 000 €

# **Narges Yousefnezhad**

Topic: Probabilistic Machine Learning Based Context Aware Security for Internet of Things

Grant: 5 000 €

# 2018

#### **Aizenbud Yariv**

Topic: Randomized algorithms in numerical linear algebra and data analysis

Grant: 5 000 €

# **Alcaraz López Onel Luis**

Topic: Efficient Multiple Access in Massive Machine-type Communication Networks

Grant: 5 000 €

#### **Anzanpour Arman**

Topic: Internet-of-Things Enabled Smart Early Warning System for In-Home Healthcare

Grant: 5 000 €

# **Apilo Olli**

Topic: Energy efficiency analysis and improvements of multiple-input multiple-output cellular

communications

Grant: 3 000 €

# Astola Pekka

Topic: Light field compression and applications

Grant: 5 000 €

#### **Azimi Iman**

Topic: Personalized Health Data Analytics Based on Internet-of-Things

Grant: 5 000 €

#### **Cakir Emre**

Topic: Deep Learning Techniques For Polyphonic Sound Event Detection In Real-Life Environments

### **Cortes Reina Santiago**

Topic: Models and methods for visual-inertial odometry

Grant: 5 000 €

# Haghighatkhah Alireza

Topic: Test Case Prioritization Using Build History and Test Similarities: An Approach for Improving

Automotive Regression Testing in Continuous Integration Environment

Grant: 5 000 €

# **Hosseinpour Farhoud**

Topic: Smart Data: Reshaping Data in IoT for Tackling the Vs of Big Data using Fog Computing

Grant: 5 000 €

#### **Khan Mohsin**

Topic: Identity privacy of a 5G user over the radio link

Grant: 5 000 €

# **Khayrudinov Vladislav**

Topic: Nanowire based all-optical computing

Grant: 5 000 €

#### **Koskela Matias**

Topic: Foveated Path Tracing for Photo-Realistic Virtual Reality

Grant: 5 000 €

# **Kumar Sanjay**

Topic: Hybrid Machine Learning Based Threat Detection System

Grant: 5 000 €

### **Kumar Tanesh**

Topic: Efficient Biometrics based User's Authentication Framework in Future Gadget-Free

Hyperconnected Environments

Grant: 5 000 €

#### **Kurvinen Joni**

Topic: Modern Handset Antennas for Future Mobile Communications

Grant: 5 000 €

### **Luoto Antti**

Topic: Lightweight Logging of 360-degree Video Users

Grant: 5 000 €

#### Ma Shubin

Topic: Multimodal Antenna-Sensor Systems for Wireless Medicine

Grant: 5 000 €

#### **Matakos Antonis**

Topic: Social media for social good: Models and algorithms

Grant: 5 000 €

### **Mehryary Farrokh**

Topic: Impacting Biomedical Research: Unsupervised Deep Learning for Literature Mining

### Melekhov laroslav

Topic: Autonomous driving localization using deep learning methods

Grant: 5 000 €

### Mikkonen Riikka

Topic: Stable and reliable material interfaces for wireless sensing applications

Grant: 5 000 €

#### **Monastero Beatrice**

Topic: Augmenting Daily Spaces and Objects for Opportunistic Social Interaction

Grant: 5 000 €

#### Montaseri Mohammad Hassan

Topic: Efficient mm-Wave/(Sub)THz CMOS Power Amplifiers Design for the Next Generation of

Wireless Communications Systems

Grant: 5 000 €

#### **Noreikis Marius**

Topic: Towards large-scale augmented reality using vision based indoor positioning

Grant: 5 000 €

#### **Ometov Aleksandr**

Topic: Social, Private, and Trusted Wearable Technology under Cloud-Aided Intermittent Wireless

Connectivity Grant: 5 000 €

#### **Paavolainen Santeri**

Topic: IoT federation based on distributed blockchain technologies

Grant: 2 000 €

### **Pandya Abhinay**

Topic: Mining social media text utilizing/harnessing special properties/features of social networks

Grant: 5 000 €

#### **Pulkkinen Mika**

Topic: Energy-Efficient Narrowband Transmitters and Gesture Sensor for Low-Power Applications

Grant: 5 000 €

### **Qian Yanlin**

Topic: Computer Vision for Low Vision Tasks: Color Constancy, Intrinsic Image Decomposition and

Super Resolution

Grant: 5 000 €

### Rahikkala Jurka

Topic: On top management participation in software project cost estimation

Grant: 5 000 €

## Ramezanipour Iran

Topic: Local licensing vs. spectrum sharing for different wireless communications applications

Grant: 5 000 €

#### Ruohonen Jukka

Topic: Essays on Software Vulnerabilities

Grant: 5 000 €

### Sahebi Golnaz

Topic: Optimization of Deep Learning Networks for Smart Medical Embedded Devices

Grant: 5 000 €

#### Santos Parrilla Adrian

Topic: Analyzing Families of Experiments in Software Engineering

Grant: 5 000 €

### **Shaheen Rana**

Topic: mm-Wave MIMO Receiver Design in nanometer CMOS for 5G Systems

Grant: 5 000 €

#### **Shehab Mohammad**

Topic: Energy efficient statistical quality of service provisioning for wireless networks

Grant: 4 000 €

### **Tabassum Muhammad Naveed**

Topic: Advanced Methods for High-Dimensional Data Analysis and Signal Processing

Grant: 5 000 €

#### **Tavakolian Mohammad**

Topic: Automatic Face Analysis using Deep Learning for Healthcare Applications

Grant: 5 000 €

### **Tcvetkova Svetlana**

Topic: Extreme and optimal metasurfaces

Grant: 5 000 €

### **Tran Quang Nguyen**

Topic: Machine learning for big data over networks

Grant: 5 000 €

#### Valkonen Mira

Topic: Machine Learning in Digital Pathology

Grant: 5 000 €

### **Wang Xuchen**

Topic: Printable Cognitive Sub-terahertz Communication Systems

Grant: 5 000 €

### **Vu Kien**

Topic: Integrated Access-Backhaul for 5G Wireless Networks

Grant: 5 000 €

#### Xu Yingyue

Topic: Human Visual Attention Analysis Based on Eye Movement Data

Grant: 4 500 €

# 2017

### **Adavanne Sharath**

Tampere University of Technology

Topic: Sound event localization and detection in real life multichannel audio using deep learning

methods

Grant: 5 000 €

# **Ahmad Ijaz**

University of Oulu

Topic: Scalable and Secure Control Plane Architecture for Software Defined Mobile Networks

Grant: 5 000 €

# **Alcaraz López Onel Luis**

University of Oulu

Topic: Efficient Multiple Access in Massive Machine-type Communication Networks

Grant: 5 000 €

#### **Badihi Behnam**

Aalto University School of Electrical Engineering

Topic: Internet of Things (IoT) in real time applications, challenges and solution

Grant: 5 000 €

# **Berg Jeremias**

University of Helsinki

Topic: Efficient Constraint Based Optimization - Algorithms and Applications

Grant: 5 000 €

#### Chen Xiaochen

Tampere University of Technology

Topic: Embroidered body-centric passive wireless sensors

Grant: 5 000 €

#### **Gapeyenko Margarita**

Tampere University of Technology

Topic: Effects and Enablers of Drone-Specific Networking in Beyond-5G Communications

Grant: 5 000 €

### Götzinger Maximilian

University of Turku

Topic: Self-Awareness in Cyber-Physical Systems

Grant: 5 000 €

#### Hakala Kai

University of Turku

Topic: Neural knowledge representations for biomedical information extraction and data-driven

discovery Grant: 5 000 €

# Hannula Jari-Matti

Aalto University School of Electrical Engineering

Topic: Advances in the Analysis and Design of Electrically Small Antennas

Grant: 5 000 €

#### He Han

Tampere University of Technology

Topic: Printed structures for textile-based passive wearable wireless sensors

Grant: 5 000 €

#### Heikkilä Mikko

University of Helsinki

Topic: Advances in privacy-preserving data analysis

Grant: 5 000 €

### Hosseini Seyedrebvar

University of Oulu

Topic: Software and Data Quality for Cross Project Defect Prediction

Grant: 5 000 €

# Jafari Tadi Mojtaba

University of Turku

Topic: Automated Detection of Atrial Fibrillation via Joint Accelerometer and Gyroscope Sensors in

Smart Embedded Devices

Grant: 5 000 €

#### Kanduri Anil

University of Turku

Topic: Approximation Techniques for Data Intensive Computing on Edge Processing Devices - Trading

Accuracy for Performance and Energy

Grant: 5 000 €

#### Kanerva Jenna

University of Turku

Topic: Boosting Finnish language technology with big data, deep neural networks and multilingual

learning

Grant: 5 000 €

### **Kanur Sudeep**

Åbo Akademi University

Topic: Towards Performance Portability of Dataflow Languages across CPU and GPU Architectures

Grant: 5 000 €

### Khan Kashif Nizam

Aalto University School of Science

Topic: Energy-efficiency in Big-data processing and large scale distributed systems

Grant: 5 000 €

# Klakegg Simon

University of Oulu

Topic: CARE - A Context-Aware Sensor System for Elderly Care

### Klouche Khalil

Aalto University School of Art and Design

Topic: Entity-Based Interactions for Fluid Information Exploration

Grant: 5 000 €

#### **Koivisto Mike**

Tampere University of Technology

Topic: High-accuracy positioning and location-aware communications in future 5G networks

Grant: 5 000 €

#### **Kumar Tanesh**

University of Oulu

Topic: Efficient Biometrics based User's Authentication Framework in Future Gadget-Free

Hyperconnected Environments

Grant: 5 000 €

# **Lemberg Jerry**

Aalto University School of Electrical Engineering

Topic: Integrated Digital-Intensive Radio Transmitters for 5G

Grant: 5 000 €

# Lempiäinen Tuomo

Aalto University School of Science

Topic: Complexity Classes in Distributed Computing

Grant: 5 000 €

#### Lintula Juuli

University of Jyväskylä

Topic: Drawbacks of Co-Creation with Users of Cyber-Physical Systems and Services: A Value Co-

**Destruction Perspective** 

Grant: 5 000 €

### **Liu Chen-Feng**

University of Oulu

Topic: Heterogeneous Resource Allocation for Hierarchical Software-Defined Radio Access Networks

at the Network Edge

Grant: 5 000 €

# Luiza Sayfullina

Aalto University School of Science

Topic: Domain adaptation for text classification using neural networks

Grant: 5 000 €

### **Majd Amin**

University of Turku

Topic: Runtime Optimization Approaches for Smart Access Points Placement using Fog Computing

Grant: 5 000 €

# Mekonnen Tenager

University of Oulu

Topic: Efficient Resource Management of Internet of Things (IoT) for scalable deployment in Future

Wireless Networks Grant: 5 000 €

#### **Mohammed Abdulmelik**

Aalto University School of Science

Topic: Algorithms and models for biomolecular nanotechnology

Grant: 5 000 €

# **Nguyen Kien-Giang**

University of Oulu

Topic: Energy-Efficient Transmission Strategies for Multi-antenna Systems

Grant: 5 000 €

# **Nouri Sajjad**

Tampere University of Technology

Topic: Harvesting the Dark Silicon Employing Heterogeneous Accelerator-Rich Platform for Energy

Conservation Grant: 5 000 €

#### Paasovaara Susanna

Tampere University of Technology

Topic: Designing Playful Mobile Technology to Encourage Social Interaction between Nearby

Strangers Grant: 5 000 €

#### Pereida Garcia Cesar

Tampere University of Technology

Topic: Side-Channel Analysis and Cryptography Engineering

Grant: 5 000 €

#### **Perez-Macias Jose Maria**

Tampere University of Technology

Topic: Sleep quality estimation, obstructive sleep apnoea (OSA) diagnostics using EMFi sensors and

sound recordings

Grant: 3 500 €

#### Rajamäki Robin

Aalto University School of Electrical Engineering

Topic: Sparse sensor array configurations and processing for active and passive sensing

Grant: 5 000 €

# **Rizwan Muhammad**

Tampere University of Technology

Topic: Design and Development of Efficient and Conformal Printed Antennas for Wireless Sensing

and Wearable Applications

Grant: 5 000 €

### **Rozenshtein Polina**

Aalto University School of Science

Topic: Analysis of interaction networks

#### Salomaa Jarno

Aalto University School of Electrical Engineering

Topic: Ultra-low power integrated circuits for energy harvesting wireless sensor nodes

Grant: 5 000 €

# Singh Bikramjit

Aalto University School of Electrical Engineering

Topic: Spectrum Management in Non-Latency and Latency constraint Next-Generation Networks

Grant: 5 000 €

# Sjövall Panu

Tampere University of Technology

Topic: Research of High-Level Synthesis by using it to Implement Kvazaar HEVC video encoder on

**FPGA** 

Grant: 5 000 €

# Tamoor-ul-Hassan Syed

University of Oulu

Topic: Computation Offloading for Efficient Resource Utilization in Low-latency Cloud-Aided Wireless

Networks with Edge Caching

Grant: 5 000 €

### **Tcvetkova Svetlana**

Aalto University School of Electrical Engineering

Topic: Extreme and optimal metasurfaces

Grant: 5 000 €

#### **Tervo Nuutti**

University of Oulu

Topic: Radio Frequency Power Amplifiers for Massive MIMO Transmitters in Future

Telecommunication Systems

Grant: 5 000 €

### **Tran Quang Nguyen**

Aalto University School of Science

Topic: Novel sampling strategy for graph signal recovery: A reinforcement learning approach

Grant: 5 000 €

# **Tzarouchis Dimitrios**

Aalto University School of Electrical Engineering

Topic: Morphological effects of resonant nanoantennas

Grant: 5 000 €

### **Upadhya Karthik**

Aalto University School of Electrical Engineering

Topic: Channel Estimation and Hybrid Beamforming for Fifth Generation Mobile Communication

Systems

Grant: 5 000€

## Viljanen Markus

University of Turku

Topic: Data Analytics: Novel Methods for Digital Customer Data

Grant: 5 000 €

#### Virk Usman Tahir

Aalto University School of Electrical Engineering

Topic: Millimeter-wave radio channel simulations and modeling for 5G Wireless Systems and beyond

Grant: 5 000 €

# Visuri Aku

University of Oulu

Topic: Designing a Quantified-Self Infrastructure to Increase Well-being and Motivate Behavioural

Change

Grant: 5 000 €

#### **Vu Kien**

University of Oulu

Topic: Joint Resource Allocation and Interference Mitigation in 5G Heterogeneous Networks,

monograph

Grant: 5 000 €

# **Vuong Tung**

University of Helsinki

Topic: User task detection and entity-centric pro-active information retrieval via screen monitoring

Grant: 5 000 €

#### Yaman Sezin Gizem

University of Helsinki

Topic: User Involvement in Continuous Experimentation

Grant: 5 000 €

# **Zhang Di**

University of Jyväskylä

Topic: Game theoretic approaches for energy-efficient resource sharing in Software-defined Wireless

Network

Grant: 5 000 €

# 2016

# **Ahmad Ijaz**

University of Oulu, Finland

Topic: Scalable and Secure Control Plane Architecture for Software Defined Mobile Networks

Grant: 5 000 €

#### **Autere Anton**

Aalto University, Finland

Topic: Novel nonlinear optical nanomaterials for optical telecommunications

# **Bani Jamali Seyed Ahmad**

University of Oulu, Finland

Topic: Software Deployment From an Open Automotive Cloud-based Ecosystem

Grant: 5 000 €

#### **Bica Marian**

Aalto University, Finland

Topic: Agile Multicarrier Radars and Coexistence with Wireless Communication Systems

Grant: 5 000 €

# **Dong Jiang**

Aalto University, Finland

Topic: Utilizing Mobile Crowdsensing in Ubiquitous Cloud Environment

Grant: 5 000 €

# **Fylakis Angelos**

University of Oulu, Finland

Topic: Data Hiding in Biomedical Signals and Images

Grant: 5 000 €

#### Gonzalez-Hautamäki Rosa

University of Eastern Finland

Topic: Intentional voice modification. A perceptual, acoustic and automatic evaluation of speaker

recognition systems.

Grant: 5 000 €

# Haghbayan Mohammadhashem

University of Turku, Finland

Topic: Heterogeneous computing in the dark silicon era

Grant: 5 000 €

### He Jiguang

University of Oulu, Finland

Topic: Lossy Decode-and-Forward over Time-Varying Wireless Sensor Networks

Grant: 5 000 €

### **Heino Mikko**

Aalto University, Finland

Topic: Isolation improvement and high frequency antenna design for future mobile communication

systems

Grant: 5 000 €

### Hosseinzadeh Shohreh

University of Turku, Finland

Topic: Software Security through Diversification, Obfuscation and Trusted Computing Techniques

Grant: 5 000 €

### Islam Md. Mazidul

Aalto University, Finland

Topic: Passive sensor RFIDs and beam steerable antenna for future communication

#### Ivannikova Elena

University of Jyväskylä, Finland

Topic: Intelligent Solutions for Information Security

Grant: 5 000 €

# Jafari Tadi Mojtaba

University of Turku, Finland

Topic: Automated Detection of Atrial Fibrillation via Joint Accelerometer and Gyroscope Sensors in

**Smart Embedded Devices** 

Grant: 5 000 €

#### Kanerva Jenna

University of Turku, Finland

Topic: Boosting Finnish language technology with big data, deep neural networks and multilingual

learning

Grant: 5 000 €

### Karhumäki Ulla

Topic: Some structures of finite Morley rank associated with the Hrushovski Programme

Grant: 5 000 €

## **Khan Kashif Nizam**

Aalto University, Finland

Topic: Energy-efficiency in Big-data processing and large scale distributed systems

Grant: 5 000 €

# **Khan Muhammad Waqas Ahmad**

Tampere University of Technology, Finland

Topic: RFID Based Telemetry System for Biomedical Applications

Grant: 5 000 €

#### **Koskela Matias**

Tampere University of Technology, Finland

Topic: Foveated Ray Tracing for Virtual Reality Applications

Grant: 5 000 €

## Kosulnikov Sergei

Aalto University, Finland

Topic: Enhancement of the radiation using wire medium based metamaterials

Grant: 5 000 €

# Li Yongzhe

Aalto University, Finland

Topic: Transmit waveforms/codes and receive filter design with applications to radar and 5G

communication Grant: 5 000 €

## Lintusaari Jarno

Aalto University, Finland

Topic: Computational inference for statistical network models

# Liu Chen-Feng

University of Oulu, Finland

Topic: Heterogeneous Resource Allocation for Hierarchical Software-Defined Radio Access Networks

at the Network Edge

Grant: 5 000 €

# **Majd Amin**

University of Turku, Finland

Topic: Runtime Optimization Approaches for Smart Access Points Placement using Fog Computing

Grant: 5 000 €

#### Naseri Hassan

Aalto University, Finland

Topic: Cooperative Localization and Mapping in Wireless Networks

Grant: 5 000 €

# **Parveg Dristy**

Aalto University, Finland

Topic: Millimeter-wave CMOS radio front-end circuits for 5G mobile communications and earth

remote sensing applications

Grant: 5 000 €

## **Peltonen Ella**

University of Helsinki, Finland

Topic: Iterative Data Analysis for Sensing Applications

Grant: 5 000 €

## **Petrov Vitaly**

Tampere University of Technology, Finland

Topic: The Last Meter Terabit-per-Second Wireless Access

Grant: 5 000 €

#### Rahimi Moosavi Sanaz

University of Turku, Finland

Topic: Scalable and Lightweight Security Solutions for Internet of Things-based Healthcare

Grant: 5 000 €

# **Rasilainen Kimmo**

Aalto University, Finland

Topic: Conformal and Multiband Antennas for Future Mobile Handsets and Wireless Sensors

Grant: 5 000 €

## **Rizwan Muhammad**

Tampere University of Technology, Finland

Topic: Design and Development of Efficient and Conformal Printed Antennas for Wireless Sensing

and Wearable Applications

Grant: 5 000 €

#### Robertsen Fredrik

Åbo Akademi University, Finland

Topic: Modern High performance Computing codes: a fluid dynamics solver using current hardware

and programming techniques

Grant: 5 000 €

#### Rozenshtein Polina

Aalto University, Finland

Topic: Analysis of interaction networks

Grant: 5 000 €

## Shariatmadari Hamidreza

Aalto University, Finland

Topic: Enabling technologies for ultra-reliable with low-latency communications

Grant: 5 000 €

# Sugathapala Inosha

University of Oulu, Finland

Topic: Resource optimization and user association with network virtualization in dynamic network

architecture through beamforming technique

Grant: 4 000 €

# Suonsyrjä Sampo

Tampere University of Technology, Finland

Topic: Methods and tools for utilizing user-interaction data in software development

Grant: 5 000 €

## Tervo Oskari

University of Oulu, Finland

Topic: Energy-Efficient Beamforming Techniques in Future Cellular Network

Grant: 5 000 €

# van Berkel Niels

University of Oulu, Finland

Topic: Longitudinal Human and Digital Sensing Using Mobile Devices

Grant: 5 000 €

## Wiik Jonatan

Åbo Akademi University, Finland

Topic: Automated formal verification of actor-based software for embedded systems

Grant: 5 000 €

#### **Voroshilov Pavel**

Aalto University, Finland

Topic: Metamaterials for energy harvesting and wireless power transfer

Grant: 5 000 €

# 2015

# Altoè Alessandro

Aalto University School of Electrical Engineering

Topic: Functional models of the auditory pathway

Grant: 5 000 €

#### Antikainen Markku

Aalto University School of Science

Topic: Design and Analysis of Security Protocols

Grant: 5 000 €

# **Asadchy Viktar**

Aalto University School of Electrical Engineering

Topic: Electromagnetic properties and applications of extreme bi-anisotropic materials and layers

Grant: 5 000 €

# Athukorala Kumaripaba

University of Helsinki

Topic: Enhancing Exploratory Information Search with User Modeling

Grant: 5 000 €

# **Baiyere Abayomi**

University of Turku

Topic: Discovering the Role of it in Disruptive Innovations – An Enabler, a Sustainer or a Barrier?

Grant: 5 000 €

# **Berglund Mathias**

Aalto University School of Science

Topic: Semi-supervised Deep Learning

Grant: 5 000 €

#### **Beyene Yihenew Dagne**

Aalto University School of Electrical Engineering

Topic: Flexible spectrum sharing and management for heterogeneous wireless networks

Grant: 5 000 €

## **Boulkenafet Zinelabidine**

University of Oulu

Topic: Multi-Modal and Anti-Spoofing Person Identification

Grant: 5 000 €

## **Byholm Benjamin**

Åbo Akademi University

Topic: Deciding on Optimal Resource Allocations with Real-Time Constraints and Uncertainty: Theory

and Practice in Cloud Computing

Grant: 5 000 €

## **Feit Anna Maria**

Aalto University School of Electrical Engineering

Topic: Computational Design of Text Entry Systems

Grant: 5 000 €

#### **Guo Jie**

Åbo Akademi University

Topic: Working Through the "Value Jungle" of Mobile Payment Ecosystem

Grant: 5 000 €

# Haghbayan Mohammadhashem

University of Turku

Topic: Heterogeneous computing in the dark silicon era

Grant: 5 000 €

#### Hannula Jari-Matti

Aalto University School of Electrical Engineering

Topic: New Techniques for Designing and Measuring Small Antennas

Grant: 5 000 €

## **Heikkinen Arto**

University of Oulu

Topic: Scalable System Architecture for Distributed Multimedia Services

Grant: 5 000 €

#### **Hokkanen Laura**

Tampere University of Technology

Topic: User Experience Work in Startups and Company Ventures: Methods and Strategy

Grant: 5 000 €

#### Hosseinzadeh Shohreh

University of Turku

Topic: Software Security through Obfuscation and Diversification Techniques

Grant: 5 000 €

## Jarusriboonchai Pradthana

Tampere University of Technology

Topic: Designing Mobile Devices and Applications to Encourage and Support Collocated Interactions

Grant: 5 000 €

## **Jayasinghe Praneeth**

University of Oulu

Topic: Dynamic TDD for heterogeneous wireless networks

Grant: 5 000 €

#### Jokela Tero

Tampere University of Technology

Topic: Novel interaction methods supporting multi-device use

Grant: 5 000 €

## **Kakouros Sofoklis**

Aalto University School of Electrical Engineering

Topic: Computational attention in single and multiple data streams: a cognitive approach enabling

efficient single- and multi-sensory processing

Grant: 5 000 €

#### Kaleva Jarkko

University of Oulu

Topic: Radio Resource Management for Heterogeneous Wireless Systems

Grant: 5 000 €

#### Kaltiokallio Ossi

Aalto University School of Electrical Engineering

Topic: Gaining situational awareness in indoor environments using narrowband radio signal

measurements Grant: 5 000 €

# Kamali Mojgan

Åbo Akademi University

Topic: Wireless Routing for Smart Electrical Grids: A Formal Methods Study

Grant: 5 000 €

#### Kanduri Anil

University of Turku

Topic: Approximation Techniques for Data Intensive Computing - Trading Accuracy for Power and

Performance Grant: 5 000 €

# **Khan Muhammad Waqas Ahmad**

University of Tampere

Topic: RFID Based Telemetry System for Biomedical Applications

Grant: 5 000 €

## Kokkala Janne

Aalto University School of Electrical Engineering

Topic: Computational methods for classification of codes

Grant: 5 000 €

# Kokkoniemi Joonas

University of Oulu

Topic: Nanoscale Sensor Networks

Grant: 5 000 €

#### Korpi Dani

Tampere University of Technology

Topic: Modeling and Digital Cancellation of Self-Interference in Full-Duplex Radio Transceivers under

Nonlinear RF Components

Grant: 5 000 €

#### **Kostakis Orestis**

Aalto University School of Science

Topic: Algorithmic Data Mining for Event-Interval Sequences

Grant: 5 000 €

## Leppänen Marko

Tampere University of Technology

Topic: Vanishing Point: Where Architectures, Infrastructures and Processes of Software Engineering

Meet

#### Liu Xin

University of Oulu

Topic: Communicative Gesture Analysis using Computer Vision Methods

Grant: 5 000 €

# **Lwakatare Lucy Ellen**

University of Oulu

Topic: Integrating Software Development and Operations units (DevOps) in software development

process to help achieve continuous product improvement and deployment

Grant: 5 000 €

#### Mehta Rakesh

Tampere University of Technology

Topic: Visual recognition from still images using textural cues

Grant: 5 000 €

# **MIkhaylov Konstantin**

University of Oulu

Topic: Modular Platform for Wireless Sensor and Actuator Networks and Internet of Things

Grant: 5 000 €

# Mirmoosa Mohammad Sajjad

Aalto University School of Electrical Engineering

Topic: Wire medium and its applications

Grant: 5 000 €

#### **Mohammed Abdulmelik**

Aalto University School of Science

Topic: Algorithms and complexity for self-assembly and self-organization

Grant: 5 000 €

#### Moradi Elaheh

Tampere University of Technology

Topic: Machine Learning Methods for Structural Brain MRI: Applications to Alzheimer's disease and

**Autism** 

Grant: 5 000 €

#### Nefedova Irina

Aalto University School of Electrical Engineering

Topic: Electrical and optical properties of nanomaterial layers for mm/wave and THz applications

Grant: 5 000 €

## **Nelimarkka Matti**

University of Helsinki

Topic: Designing live participation systems: computational and social transformation of co-located

computer-mediated communication

Grant: 2 240 €

# **Nguyen Gia Tuan**

University of Turku

Topic: Reliability and Energy Efficiency of Real-time Healthcare Monitoring Internetof-things-based

System

Grant: 5 000 €

#### Peltonen Ella

University of Helsinki

Topic: Iterative Data Analysis for Sensing Applications

Grant: 5 000 €

# **Petrov Vitaly**

Tampere University of Technology

Topic: The Last Meter Terabit-per-Second Wireless Access

Grant: 5 000 €

# **Porambage Pawani**

University of Oulu

Topic: Integrating Security Solutions for Resource-constrained Networking Devices in the Internet of

Things

Grant: 5 000 €

#### **Radi Younes**

Aalto University School of Electrical Engineering

Topic: Functional Metasurfaces

Grant: 5 000 €

# Rybicki Joel

Aalto University School of Science

Topic: Fault-tolerant co-ordination in distributed systems

Grant: 5 000 €

#### Saarela Mirka

University of Jyväskylä

Topic: Knowledge Discovery from PISA using Educational Data Mining

Grant: 5 000 €

# Samarakoon Sumudu

University of Oulu

Topic: Energy Efficient Interference Coordination for Self-Organizing Small-Cells Networks

Grant: 5 000 €

#### Semkin Vasilii

Aalto University School of Electrical Engineering

Topic: Radio wave propagation modeling at mm-wave frequencies for planning 5G mobile networks

using high accurate 3D models

Grant: 5 000 €

## **Sethi Mohit**

Aalto University School of Science

Topic: Security for Ubiquitous Internet-connected smart objects

Grant: 5 000 €

## **Shahabuddin Shahriar**

University of Oulu

Topic: MIMO Baseband Signal Processing Architectures for 5G

Grant: 5 000 €

# **Singh Simran**

Tampere University of Technology

Topic: Frequency Response Mismatch Correction in Time-Interleaved Analog-to-Digital-Converters

Grant: 5 000 €

# Soikkeli Tapio

Aalto University School of Electrical Engineering

Topic: End user context in characterizing and modeling the usage of mobile services

Grant: 5 000 €

# Wijewardhana Uditha

University of Oulu

Topic: Optimization & Learning methods for signal processing with applications in wireless networks

Grant: 5 000 €

# Yang He

Aalto University School of Electrical Engineering

Topic: High-repetition-rate graphene based ultrafast lasers for telecommunication applications

Grant: 5 000 €

# 2014

# AghababaeeTafreshi Mona

Topic: Future 5G Wireless Local Area Connectivity Solutions and SDR implementation

Grant: 4000 €

#### **Ahmad Muhammad Ovais**

Topic: Exploring Kanban in software companies

Grant: 4500 €

## **Ahmad Tanwir**

Topic: Online Model-based Security Testing with Behavioral Fuzzing

Grant: 5000 €

## **Antikainen Markku**

Topic: Design and analysis of security protocols

Grant: 5000 €

# **Asadchy Viktar**

Topic: Electromagnetic properties and applications of extreme bi-anisotropic materials and layers

Grant: 5000 €

#### **Behravan Hamid**

Topic: Automatic Dialect and Foreign Accent Recognition

## **Benjamin Byholm**

Topic: Deciding on Optimal Resource Allocations with Real-Time Constraints and Uncertainty: Theory

and Practice in Cloud Computing

Grant: 5000 €

# **Bugdayci Sansli Döne**

Topic: Methods and Algorithms for Next Generation Video Communications

Grant: 5000 €

# **Chernov Sergey**

Topic: Network management optimization for self-organizing radio networks

Grant: 5000 €

# **Chouhan Shailesh Singh**

Topic: CMOS circuits for RF powered, passive Wireless Sensors

Grant: 5000 €

#### **Farahnakian Fahimeh**

Topic: Hierarchical Multi-Agent Based Architecture for Energy -Efficient Cloud Data Centers

Grant: 5000 €

## Fu Junsheng

Topic: Fast and Robust Camera Pose Estimation in Large Scale 3D Urban Environment

Grant: 5000 €

#### **Fucci Davide**

Topic: Understanding the effects of Test-driven development

Grant: 5000 €

## **Grigorevskiy Alexander**

Topic: Long-Term Time Series Forecasting for Industrial and Environmental Applications

Grant: 5000 €

#### Hasani Masoumeh

Topic: Nanomaterial Based Rfid-Enabled Wireless Sensing Tags

Grant: 5000 €

#### Hemminki Samuli

Topic: Everyday Mobility and Transportation Behavior Sensing on Mobile Devices

Grant: 5000 €

## **Holvitie Johannes**

Topic: Technical Debt Management as a Factor in Sustainable and Efficient Software Development

Grant: 5000 €

#### **Hukkanen Jenni**

Topic: Advanced statistical modeling techniques for inference and data representation

Grant: 5000 €

## **Jafri Syed Mohammad Asad Hassan**

Topic: VRAP: Virtual Runtime Adaptive Partitions to support mixed criticality applications on

Massively Parallel Architectures

#### Janka Marika

Topic: Self-alignment patterning and passivation processes in printed electronics

Grant: 5000 €

#### **Jokinen Emma**

Topic: Development and evaluation of intelligibility enhancing algorithms for telephone speech

Grant: 5000 €

# Kaaresoja Topi

Topic: Feedback Is... Late: Investigation of Multimodal Latencies in Mobile Touchscreen Interaction

Grant: 5000 €

# Kauppinen Olli

Topic: Improving application and location-based push services with modes and user profile

Grant: 5000 €

#### **Kertesz Csaba**

Topic: Community driven artificial intelligence development for Sony AIBO

Grant: 5000 €

## Keränen Pekka

Topic: High precision time-to-digital converter for applications requiring wide measurement range

Grant: 5000 €

## Kokkala Janne

Topic: Computational methods for classification of codes

Grant: 5000 €

#### Lehtimäki Suvi

Topic: Printable supercapacitors for energy harvesting

Grant: 5000 €

## Leppäniemi Jaakko

Topic: Printed electronics components and devices - memories and logic

Grant: 5000 €

#### Luoto Petri

Topic: Performance analysis and optimization of future heterogeneous networks

Grant: 5000 €

## Luusua Anna

Topic: Experiencing and Designing Digitally Augmented Urban Places

Grant: 4000 €

#### **Malmi Eric**

Topic: Computational methods for the reconstruction and analysis of family trees

Grant: 5000 €

#### Mariescu-Istodor Radu

Topic: Handling location-based data

## Mattila Anna-Liisa

Topic: Visualizations for Software Analytics

Grant: 5000 €

## Merisaari Harri

Topic: Improvement of quantitative precision in MR and PET imaging

Grant: 5000 €

# **MIkhaylov Konstantin**

Topic: Modular Platform for Wireless Sensor and Actuator Networks and Internet of Things

Grant: 5000 €

# Myllykoski Mirko

Topic: Fast Direct Solvers for GPUs

Grant: 5000 €

#### Mämmelä Olli

Topic: Advanced decision algorithms for managing the increasing amount of mobile data and

number of users in future mobile networks

Grant: 3000 €

## **Nefedova Irina**

Topic: Dielectric property measurements of nanomaterials at 0.1-1THz

Grant: 5000 €

#### Niskanen Reino

Topic: Reachability in context of Robot Games

Grant: 5000 €

## Nurminen Henri Jaakko Julius

Topic: Bayesian probabilistic models and mathematical methods in hybrid indoor positioning

Grant: 5000 €

#### Pereverzeva Inna

Topic: Formal Development of Resilient Autonomic Distributed Systems

Grant: 5000 €

#### Pihlajamäki Tapani

Topic: Parametric spatial sound reproduction and synthesis for virtual realities

Grant: 5000 €

# Pohjankukka Jonne

Topic: Efficient Utilization of Big Data with Machine Learning Methods

Grant: 5000 €

#### **Radi Younes**

Topic: "Optimal materials" for interactions with electromagnetic fields

Grant: 5000 €

#### Raeesi Orod

Topic: Channel Non-Reciprocity in the Future Energy and Spectrally Efficient "Massive MIMO":

Analysis and Mitigation

#### Rahimi Moosavi Sanaz

Topic: Scalable And Lightweight Security Solutions For Internet Of Things-Based Healthcare

Grant: 5000 €

# Rajasekharan Jayaprakash

Topic: Game-Theoretic Modeling of Cooperative Behaviour in Cognitive Radio and Smart Grid

Systems Grant: 5000 €

#### Rasilainen Kimmo Aleksi

Topic: Antennas for Future Mobile Handsets and Wireless Sensors

Grant: 5000 €

# Reponen Erika

**Topic: Mobile Video Communication** 

Grant: 5000 €

### Riekkinen Janne

Topic: Legal and Illegal Digital Content Downloading - Integrating the Behavioral Information Systems

Frameworks Grant: 5000 €

#### Riikonen Antti

Topic: Empirical analysis of the diffusion and usage of mobile devices

Grant: 5000 €

#### **Roverato Enrico**

Topic: All-Digital Wideband Transmitters for Cellular Applications

Grant: 5000 €

# Rummukainen Olli

Topic: Multimodal perception in reproduced environments: Models and metrics

Grant: 5000 €

## **Rönnqvist Samuel**

Topic: Text Analytics for Financial Risk

Grant: 5000 €

## Samarakoon Sumudu

Topic: Energy Efficient Interference Coordination for Self-Organizing Small-Cells Networks

Grant: 5000 €

#### Schiopu Ionut

Topic: Depth-Map Image Compression

Grant: 5000 €

## **Shahabuddin Shahriar**

Topic: MIMO Baseband Signal Processing Architectures for 5G

Grant: 5000 €

## **Shams Shafigh Alireza**

Topic: Networking Paradigms for future high density wireless networks

# **Song Jinsong**

Topic: On Passive Wireless Sensors

Grant: 5000 €

## Törmä Ilkka

Topic: Structural and Computational Existence Results for Multidimensional Subshifts

Grant: 5000 €

# Vathsavayi Sri Harsha

Topic: Applying Search-based Techniques for Software Architecture Design and Planning

Grant: 5000 €

#### Viitanen Timo

Topic: Optimized Tree Construction and Primitive Intersection Hardware for Mobile Real-Time Ray

Tracing

Grant: 5000 €

#### Ylioinas Juha

Topic: Discriminative and robust methods for face recognition in the wild.

Grant: 5000 €

# 2013

# Acharya Karthikeya

Topic: Design Implications from the Domestic Electric: As Products, Practices and Place

Grant: 5000 €

## **Akusok Anton**

Topic: Machine Learning for Internet Security

Grant: 5000 €

## **Alves Hirley**

Topic: On the Performance and Energy Efficiency Analysis of Full-Duplex Schemes

Grant: 5000 €

# **Arianfar Somaya**

Topic: Speed matters-revisiting the Internet architecture

Grant: 5000 €

### **Ashraf Adnan**

Topic: Cost-Efficient Virtual Machine Provisioning for Multi-tier Web Applications and Video

Transcoding Grant: 5000 €

## **Cierny Michal**

Topic: Interference management for wireless cellular networks

#### **Delikaris-Manias**

Topic: Symeon Parametric spatial audio coding algorithms for post-filtering applications and sound-

field reproduction

Grant: 5000 €

# **Diaz Rodriguez Natalia**

Topic: Semantic and Fuzzy Modelling of Human Behaviour in Smart Spaces. A case study on

Ambient Assisted Living

Grant: 5000 €

## DING Yi (Aaron)

Topic: Enabling Efficient and Collaborative Traffic Management for Mobile Systems

Grant: 5000 €

#### **Ebrahimi Masoumeh**

Topic: Reliable Interconnection Network from Unreliable Components for Many-Core Embedded

Systems Grant: 5000 €

## **Fagerholm Fabian**

Topic: Software Process Ergonomics: Enhancing Software Developer Experience in Open

Environments Grant: 3500 €

## **Ferdinand Nuwan Suresh**

Topic: Lattice Codes for Cooperation: Theory, Security and Practical Perspectives

Grant: 5000 €

## **Georgiev Mihail**

Topic: Fusion of 2D video and depth data captured by time-of-flight devices in poor sensing

environments Grant: 5000 €

#### **Goncalves Jorge**

Topic: Designing Technology to Foster Participation In-the-Wild

Grant: 5000 €

#### Hakkarainen Aki

Topic: Analysis and Mitigation Methods of RF Imperfections in Beamforming

Grant: 5000 €

#### He Xin

Topic: Optimal Rate-Distortion Allocation for Wireless Sensor Networks based on CEO problem

Grant: 5000 €

## Heljo Petri

Topic: Printed Organic Diodes for RF and Logic Applications

Grant: 5000 €

## **Herrera Castro Daniel**

Topic: Computer Vision Methods for Computational Photography and Free Viewpoint Rendering

#### **Hirvonen Juho**

Topic: Lower Bounds in Distributed Computing

Grant: 5000 €

#### **Holvitie Johannes**

Topic: Technical Debt Management as a Factor in Sustainable and Efficient Software Development

Grant: 5000 €

# **Huang Xiaohua**

Topic: Emotion recognition from facial expressions for affective human-computer interaction

Grant: 4000 €

#### **Islam Muhammad Nazrul**

Topic: Optimizing the End User Experiences and Usability of Web Applications

Grant: 5000 €

# **Jafri Syed Mohammad Asad Hassan**

Topic: Private configuration environments for massively parallel architectures. Thesis explores various virtualization techniques to enhance the application efficiency on massively parallel architectures.

Grant: 5000 €

#### **Joachimiak Micha**

Topic: Compression oriented 3D Video Processing

Grant: 5000 €

#### **Jokhio Fareed Ahmed**

Topic: Video transcoding with parallel and distributed computation

Grant: 5000 €

#### **Jokinen Emma**

Topic: Development and evaluation of intelligibility enhancing post-filtering algorithms for narrowband

telephone speech

Grant: 5000 €

## Joshi Satya Krishna

Topic: Radio Resource Management in Wireless Communication Networks (From the Optimal

(Centralized) Solution towards Distributed Implementations)

Grant: 5000 €

## **Juhola Tomi**

Topic: Agile software development methods as innovation drivers

Grant: 5000 €

#### Kaltiokallio Ossi

Topic: Gaining situational awareness in indoor environments through wireless communications

Grant: 5000 €

# **Karunarathna Suneth Namal**

Topic: Secure Mobility Management in Future Heterogeneous Software Defined Networks

#### **Khatun Afroza**

Topic: Advanced Scanning Techniques for Field Synthesis and Near-field Antenna Measurements

Grant: 5000 €

# Kizhakkepallathu Ashik Mathew

Topic: Combinatorial algorithms for some packing, covering and tiling problems

Grant: 5000 €

## Komulainen Jukka

Topic: 2D Face Biometrics under Spoofing Attacks

Grant: 5000 €

## Koski Eveliina

Topic: Nanofabrication and Characterisation of Templated Quantum Dot Arrays for Cellular Automata

Grant: 5000 €

# Koski Karoliina

Topic: Issues in RFID-Enabled Body-Centric Wireless Systems

Grant: 5000 €

# **Kuparinen Liisa**

Topic: Designing Mobile Map Services: the Viewpoint of Spatial Cognition in Navigation

Grant: 5000 €

### Laddu Keeth

Topic: Energy Efficient Wireless Systems with Cooperative Relays, MIMO, and Physical Layer Network

Coding

Grant: 5000 €

## **Lehtiniemi Arto**

Topic: Iterative design and user evaluation of music discovery concepts

Grant: 5000 €

#### **Leinonen Markus**

Topic: Distributed Cross-layer Optimization in Energy Efficient Data Gathering Wireless Sensor

Networks Grant: 5000 €

## Liyanage Lakmal

Topic: Secure Virtual Network Architectures for Future Telecommunication Networks

Grant: 5000 €

# Maggioni Matteo

Topic: Adaptive nonlocal signal restoration and enhancement techniques for high-dimensional data

Grant: 5000 €

#### Mansikkaniemi Andr

Topic: Unsupervised Language Model Adaptation for Automatic Speech Recognition

Grant: 5000 €

## **Mehta Rakesh**

Topic: Visual recognition from still images using textural cues

#### **Molchanov Pavlo**

Topic: Radar target classification: spectral approach

Grant: 5000 €

# **Moradi Elham**

Topic: RFID Based Telemetry in Body-Centric Sensing Systems

Grant: 5000 €

## Mäkitalo Niko

Topic: Coordinating devices and smart objects in mobile clouds

Grant: 4000 €

## Nurkka Piia

Topic: The notion of user values: the effect of customization on user experience

Grant: 5000 €

# Ojaniemi Jaakko

Topic: Data assimilation and mapping tools for radio environment modeling

Grant: 5000 €

# **Ostroumov Sergii**

Topic: Rigorous Design and Efficient Implementation of Agent-based Management Systems for

Many-Core Platforms

Grant: 5000 €

#### **Pfister Tomas**

Topic: Automatic Recognition of Sign Language

Grant: 5000 €

## Prokhorova Iuliia

Topic: Rigorous Development of Safety-Critical Systems

Grant: 5000 €

# Rezazadegan Tavakoli Hamed

Topic: Saliency detection in images and videos

Grant: 5000 €

#### **Rodriguez Pilar**

Topic: Combining Lean Thinking and Agile Software Development: How Do Software-Intensive

Companies Use Them in Practice?

Grant: 5000 €

#### **Roverato Enrico**

Topic: All-Digital Wideband Transmitters for Mobile Applications

Grant: 5000 €

# Saarikivi Olli

Topic: Automated testing methods for concurrent software

Grant: 5000 €

## **Schuss Christian**

Topic: Modelling and Optimisation of Energy Harvesting from Renewable Energy Resources

#### Semkin Vasilii

Topic: Reconfigurable antenna arrays and radio-wave propagation for high-capacity millimeter-wave

communications Grant: 5000 €

# **Soleimany Hadi**

Topic: Analysis of Lightweight Cryptographic Consturctions

Grant: 5000 €

#### Suomi Henna

Topic: Techno-economic feasibility analysis of multipath protocols in the Internet

Grant: 5000 €

# **Syeed Mahbubul**

Topic: Comprehending co-evolution of OSS projects: Analytical methods and tool support

Grant: 4000 €

## **Tabarcea Andrei**

Topic: Location-based Applications

Grant: 5000 €

#### Takala Tuukka

Topic: Software Platform for Developing 3D User Interfaces

Grant: 5000 €

# **Touray Almamy**

Topic: Sustainable Solutions for Last Mile Internet Access: Critical Success Factors

Grant: 5000 €

## **Tuovinen Tommi**

Topic: UWB Antennas and Radio Channel Measurements for Use in Wireless Body Area Networks

Grant: 5000 €

## Waga Karol

Topic: Context Aware Recommendation of Location-based Data

Grant: 5000 €

# **Wagner Paul**

Topic: Unifications in reinforcement learning, with applications to humanoid virtual actor desig

Grant: 5000 €

## Vathsavayi Sri Harsha

Topic: Applying Search-based Techniques for Software Architecture Design and Planning

Grant: 5000 €

#### **Werner Janis**

Topic: Sensing, Localization and Accessing Spatial Spectrum Holes in Cognitive Radio Networks

Grant: 5000 €

#### Vihavainen Arto

Topic: Evidence-driven Programming Education

# Wu Zhengzhe

Topic: Spectral Image Segmentation and Object Recognition, a Combined Approach

Grant: 5000 €

# Ylipulli Johanna

Topic: Adoption and Meanings of Ubiquitous Technology in Northern Urban Space

Grant: 5000 €

# **Zhang Nan**

Topic: Techno-economic analysis of Internet content delivery technologies

Grant: 5000 €

# 2012

# Aflaki Beni Payman

Topic: Asymmetric stereoscopic 3D video compression

Grant: 5000 €

#### **Alahdab Salim**

Topic: A High Resolution Time-to-Digital Converter (TDC) Based On a Cyclic Time Domain Successive

Approximation Interpolation Method for All Digital Frequency Synthesis

Grant: 5000 €

## **Anteroinen Johanna Katariina**

Topic: Electrical Properties and Applications of Graphene Devices

Grant: 5000 €

#### **Ashraf Adnan**

Topic: Cost-Efficient Resource Allocation for Multi-tier Web Applications in a Cloud Environment

Grant: 5000 €

#### **Bhattacharya Souray**

Topic: Enriching Sensor Data on Mobile Platform - A Machine Learning Approach

Grant: 5000 €

# **Chang Zheng**

Topic: Energy and Spectral Efficient Solutions for OFDMA Wireless Networks

Grant: 5000 €

## **Cochez Michael Serge Lia**

Topic: Application of evolutionary computing in the context of ontology optimization

Grant: 5000 €

#### **Costa Mario**

Topic: Efficient Signal Processing Techniques for Smart Multi-Antenna Systems

## **Cui Yanqing**

Topic: Social Networking Services on Mobile Devices: User Interface Designs and User Experience

Studies

Grant: 5000 €

# **Dahlberg Krista Hannele**

Topic: Measurements and characterisation of millimeter wave Schottky diodes

Grant: 5000 €

#### **DING Yi**

Topic: Enabling Efficient and Collaborative Traffic Management for Mobile Systems

Grant: 5000 €

## **Ebrahimi Masoumeh**

Topic: Robust on-Chip Interconnect Network using Learning Approaches

Grant: 5000 €

# **Ekman Inger Margareta**

Topic: Game Sound Design

Grant: 5000 €

### **Farhan Muhammad**

Topic: Signal and Image Processing Methods for Systems Biology

Grant: 5000 €

#### **Ferdinand Nuwan Suresh**

Topic: Analyze and design of cooperative networks

Grant: 5000 €

#### **Goncalves Jorge**

Topic: Designing Technology to Foster Participation in the Wild

Grant: 5000 €

#### **Grönroos Stefan Andreas**

Topic: Efficient Algorithms for Reconfigurable Software-Based Multimedia Delivery Platforms

Grant: 5000 €

## Hadaytullah Hadaytullah

Topic: Genetically self-adaptive software systems

Grant: 5000 €

## Heinimäki Teemu Johannes

Topic: Improving Game Al Quality

Grant: 5000 €

#### Heittola Toni Kristian

Topic: Methods for Computational Auditory Scene Analysis and Synthesis

Grant: 5000 €

# **Holmbom Annika Helena**

Topic: Customer Segmentation with Data Mining Methods - from vast amount of data to actual

knowledge Grant: 5000 €

## Hyrynsalmi Sami Tapani

Topic: Emergence of Digital Software Marketplaces

Grant: 5000 €

# Jacob Mathecken, Philip John Pramod

Topic: Study of RF-Impairments in Modern Telecommunication Systems: Analysis and Compensation

Techniques Grant: 5000 €

#### **Jokhio Fareed Ahmed**

Topic: Video transcoding with parallel and distributed computation

Grant: 5000 €

# Joshi Satya Krishna

Topic: Radio resource management in wireless communication networks - from the optimal

(centralized) solution towards distributed implementations

Grant: 5000 €

# Juliano Nardelli, Pedro Henrique

Topic: Spatial Spectral Efficiency in Wireless Networks

Grant: 5000 €

#### **Juvonen Antti**

Topic: Data mining solutions for enhancing network data security

Grant: 5000 €

## Kallio Mikko Aleksi

Topic: Real-world applications of randomization methods in data mining

Grant: 5000 €

#### Kamali Maryam

Topic: Formal Methods for the Analysis of Wireless Sensor Networks

Grant: 5000 €

## **Kanth Rajeev Kumar**

Topic: Analysis, Design and Life Cycle Assessment of Printed Antenna

Grant: 5000 €

## Karhila Reima

Topic: Adaptation of Statistical Speech Synthesis Using Suboptimal Data

Grant: 5000 €

#### **Katsigiannis Michail**

Topic: The evolution of radio access networks: Economical insights for Finnish mobile operators

Grant: 5000 €

#### **Kaufman Brett**

Topic: Analog and Digital Techniques of Self-Interference Cancellation for Full-Duplex Communication

Grant: 5000 €

## **Kaur Puneet**

Topic: Open Service Innovation for Digital Services

#### **Khatun Afroza**

Topic: Advanced Scanning Techniques for Field Synthesis and Near-field Antenna Measurements

Grant: 5000 €

## Kuusinen Antti Veikko Olavi

Topic: Perception of music in performance spaces - Search for the best acoustics

Grant: 5000 €

## Lagerspetz Eemil Henrik

Topic: Context-aware Collaborative Energy Efficiency Solutions

Grant: 5000 €

## Laine Markku Pekka Mikael

Topic: Unified Web Application Development: A Presentation-Centric Approach Based on Declarative

Languages Grant: 5000 €

#### Leinonen Markus Kristian

Topic: Distributed Cross-layer Optimization in Wireless Sensor Networks

Grant: 5000 €

## Levä Tapio

Topic: Diffusion of communication protocols in the Internet

Grant: 5000 €

# Liyanage Lakmal Madhusanka

Topic: Performance cost of security in future telecommunication networks

Grant: 5000 €

## **Maglyas Andrey**

Topic: Overcoming complexity of software product management

Grant: 5000 €

#### **Mahmood Aamir**

Topic: Enabling Time Synchronized and Interference-Aware Initialization of Wireless Sensor Networks

Grant: 5000 €

#### Niemelä Ville Johannes

Topic: Enabling future Wireless Healthcare Systems

Grant: 5000 €

## Niittynen Juha

Topic: Performance and reliability of printable electronics

Grant: 5000 €

#### Nikou Shahrokh

Topic: Opening the black-box of IT artifacts: looking into mobile service characteristics and individual

perception Grant: 5000 €

## Nygren Eeva Liisa

Topic: Increasing motivation towards mathematics through educational games

## Nyländen Teemu Ilmari

Topic: Energy Efficient Signal Processing Hardware Implementations for Future Wireless Systems

Grant: 5000 €

## Oksanen Jan Henrik Salomo

Topic: Spectrun sensing and access policies for cognitive radio

Grant: 5000 €

# **Pepe Antonietta**

Topic: Computational models and mathematical representations of 3D shapes

Grant: 5000 €

#### Pereverzeva Inna

Topic: Formal Development of Resilient Autonomic Distributed Systems

Grant: 5000 €

# Pervilä Mikko Antti Tapani

Topic: Data Center Energy Retrofits

Grant: 5000 €

#### **Pettersson Ville Hermanni**

Topic: Graph Algorithms for Routing and Domination problems

Grant: 5000 €

# Pouke Matti Reijo Juhani

Topic: Activity Data Visualisation in 3D Virtual Environments

Grant: 5000 €

#### **Putaala Jussi Mikael**

Topic: Reliability of electronics interconnections and their prognostic monitoring methods in novel

applications Grant: 5000 €

## Raitoharju Matti Samuli

Topic: Mathematical methods for indoor positioning

Grant: 5000 €

## Rasilo Heikki Ville Tapani

Topic: Creating an articulatory model and a speech acquisition mechanism for a learning virtual

infant, LeVI Grant: 5000 €

#### Rezaei Mohammad

Topic: Clustering of location-based data

Grant: 5000 €

#### **Ruotsalainen Laura Maria**

Topic: Visual-aided navigation in smartphones for challenging GNSS signal environments

Grant: 5000 €

## **Salo Markus**

Topic: Explaining Extreme Experiences of Mobile Interaction with the Real World

#### Sarlin Peter Sebastian Johan

Topic: Financial Stability Surveillance with Computational Intelligence

Grant: 5000 €

# Sipola Tuomo Severi

Topic: Spectral signature extraction from high-dimensional manifolds

Grant: 4000 €

# Syeed M.M. Mahbubul

Topic: Comprehending co-evolution of Open Source Software (OSS) Projects: Analytical methods and

tool support Grant: 3500 €

# **Tamrakar Sandeep**

Topic: New Applications of Mobile Trusted Computing and NFC

Grant: 5000 €

# **Tchamov Nikolay Nikolaev**

Topic: Optimization of OFDM receivers in the presence of phase noise

Grant: 5000 €

## **Thombre Sarang**

Topic: Test-bench for Automated Testing of GNSS Receivers

Grant: 5000 €

# van Heeswijk Mark

Topic: Scalable Machine Learning Algorithms on Massively Parallel Architectures

Grant: 5000 €

#### Venkatraman Ganesh

Topic: Resource Allocation for Users in LTE - A systems

Grant: 5000 €

## Vilkamo Juha Tapio

Topic: Advanced adaptive perceptual spatial sound processing methods

Grant: 5000 €

#### **Vuorela Samu Jeremias**

Topic: Determining, analysing and system-level modelling of the reliability of power supplies for LED

applications Grant: 5000 €

#### **Wagner Paul Juha**

Topic: Unifications in reinforcement learning, with applications to humanoid virtual actor design

Grant: 5000 €

#### Wei Lu

Topic: Spectrum Management for Future Wireless Systems

Grant: 5000 €

## Xiaohua Huang

Topic: Emotion recognition from facial expressions for affective human-computer interaction

# 2011

#### **Abbors Fredrik Mikael**

Topic: Model-based Performance Testing of Telecommunication Systems

Grant: 5000 €

#### **Ahlroth Lauri Ilmari**

Topic: Combinatorial optimization under uncertainty

Grant: 5000 €

# **Andreev Sergey**

Topic: Energy Efficiency Optimization for Modern Wireless Networks

Grant: 5000 €

# **Björne Jari Kristian**

Topic: Extraction of Scientific Knowledge from Textual and Experimental Data

Grant: 5000 €

# **Bordallo López Miguel**

Topic: Designing for image-based 3D interactivity

Grant: 5000 €

# **Casey Thomas Robert**

Topic: Value Network Dynamics and Evolution of Mobile Access Provisioning

Grant: 5000 €

#### Cauduro Dias de Paiva Rafael

Topic: REAL-TIME SIMULATION OF VINTAGE ANALOG AUDIO ELECTRONICS

Grant: 5000 €

## **Chen Minjie**

Topic: Compression of GPS Trajectories

Grant: 5000 €

# Fagerlund Seppo Ilmari

Topic: Methods and Systems for Natural Audio Event Detection

Grant: 5000 €

#### **Ferreira Denzil**

Topic: AWARE: Application Warehouse for Awareness Research & Engineering

Grant: 5000 €

## **Gamper Hannes**

Topic: Interactive Audio Augmented Reality

Grant: 5000 €

## **Ginzboorg Philip**

Topic: Traffic Control in Challenged Networks

#### **Grönroos Stefan Andreas**

Topic: Efficient algorithms for reconfigurable software-based multimedia delivery platforms

Grant: 5000 €

#### **Guo Yimo**

Topic: Local Texture Descriptors for Image and Video Analysis

Grant: 5000 €

## **Herrera Daniel**

Topic: Transparency aware free viewpoint rendering

Grant: 5000 €

#### **Holm Jukka Antero**

Topic: Visualizations of Music Collections Based on Metadata: Concepts and User Studies

Grant: 5000 €

## Hyrynsalmi Sami Tapani

Topic: Recognizing Components with High Risk on Security

Grant: 5000 €

#### Jin Lina

Topic: Quality Assessment for 2D and 3D Image&Video

Grant: 5000 €

# Juliano Nardelli, Pedro Henrique

Topic: Spatial Spectral Efficiency in Wireless Networks

Grant: 5000 €

#### **Kalwar Santosh**

Topic: COMHAI\_EAGLE

Grant: 5000 €

#### Karikoski Juuso Olli Aleksi

Topic: Empirical analysis of mobile communication service usage patterns and related social

networks Grant: 5000 €

## **Karilainen Antti**

Topic: Magnetic materials, responses and currents in antenna applications

Grant: 5000 €

#### **Keronen Sami Antero**

Topic: Model based noise robust speech recognition methods

Grant: 5000 €

## Kiayani Adnan Qamar

Topic: Advanced DSP Techniques for RF Impairments Mitigation in Future Radio Devices

Grant: 5000 €

#### Kilamo Terhi

Topic: Essential Properties of Open Development Communities

# Kyrö Mikko Ville

Topic: Millimeter wave propagation and antennas for wireless communications systems

Grant: 5000 €

## Laakso Frans Joel Juhani

Topic: A Study on Performance Enhancements for High Speed Uplink Packet Access

Grant: 4000 €

# Lampinen Airi Miina Inkeri

Topic: Balancing Acts. Interpersonal Management of Privacy and Publicness in Social Network

Services.

Grant: 5000 €

# Leppänen Marko Kristian

Topic: Pattern-based development of machine control system

Grant: 5000 €

# Liu Chenghao

Topic: Advances on Multimedia Streaming for Mobile Applications

Grant: 5000 €

# Lorenzo Veiga Beatriz

Topic: Advanced Radio Resource Management for Cellular Networks

Grant: 5000 €

# Lu Xiaojia

Topic: Resource allocation for coordinated multicell MIMO in 3D channel models

Grant: 5000 €

### **Luoto Markus Antero**

Topic: Distributed Information and Decision Framework for Seamless IP Mobility

Grant: 5000 €

## **Maglyas Andrey**

Topic: Software product management in traditional and cloud environments

Grant: 5000 €

## Marttila Jaakko

Topic: Advanced Quadrature Sigma-Delta Modulators for Cognitive Radio Analog-to-Digital Interface

Grant: 5000 €

## **Mesaros Annamaria**

Topic: Methods for automatic singing voice identification, transcription and alignment

Grant: 5000 €

## Miettinen Pekka Juhani

Topic: Model-order Reduction in Circuit Theory and Electromagnetics

Grant: 5000 €

#### Niemelä Ville Johannes

Topic: Enabling future Wireless Healthcare Systems

#### **Nieminen Jari Armas**

Topic: Multiple Access Control and Time Synchronization in Delay-Sensitive Multi-Channel Wireless

Sensor Networks Grant: 5000 €

#### Oksanen Jan Henrik Salomo

Topic: Spectrum sensing and access policies for cognitive radio

Grant: 5000 €

## **Olsson Thomas Daniel**

Topic: User experience and expectations of mobile augmented reality services

Grant: 5000 €

## **Pantisano Francesco**

Topic: Self Organization in Two-tier Next Generation Networks

Grant: 5000 €

#### Perttula Arttu Turkka Ilmari

Topic: Collective experience in co-creational spaces through mobile devices

Grant: 5000 €

#### Pesonen Henri Eerikki

Topic: Robust positioning algorithms and quality monitoring using Bayesian methods

Grant: 5000 €

#### **Pitaval Renaud-Alexandre**

Topic: Analytical design of low-complexity MIMO precoding codebooks

Grant: 5000 €

### Prokhorova Iuliia

Topic: Integrating Safety Analysis into Development of Software-Intensive Critical Systems

Grant: 5000 €

## **Pulkkinen Jenni Karoliina**

Topic: MUVIS Grant: 5000 €

## RahmaniSane AmirMohammad

Topic: Power Analysis and Optimization in 3D-Networks on Chip

Grant: 5000 €

#### **Raitio Tuomo Johannes**

Topic: Hidden Markov Model-Based High-Quality Speech Synthesis Based On Physiological Modeling

of Human Voice Production Mechanism

Grant: 5000 €

#### Rantanen Ville

Topic: Capacitive Sensing in Human-Technology Interaction Applications

#### Räsänen Okko Johannes

Topic: Unsupervised and weakly supervised methods in computational modeling of language

acquisition Grant: 5000 €

#### **Rauf Irum**

Topic: Contract-Based Design and Validation of RESTful Web Services using Models

Grant: 5000 €

#### **Ruotsalainen Laura Maria**

Topic: Visual-aided navigation in smartphones for challenging GNSS signal environments

Grant: 5000 €

#### Salminen Arto Kalervo

Topic: Integrating Web Content into Mashups on Desktop and Mobile Devices

Grant: 5000 €

# Salo Markus Touko Tapani

Topic: Customer Value and Adoption of Mobile Interactions with the Real World

Grant: 5000 €

# Santala Olli Henrik

Topic: Spatial sound perception and its binaural auditory modeling

Grant: 5000 €

# Sobocinski Maciej Julian

Topic: Piezoelectric structures embedded in Low Temperature Co-fired Ceramic [LTCC]

Grant: 5000 €

#### Sonkki Marko Tapani

Topic: Wideband Single and Multielement Antennas for Wireless Applications

Grant: 5000 €

## **Stibe Agnis**

Topic: Social Web as Persuasive Technology: Features and Factors

Grant: 4500 €

# **Tarasyuk Anton**

Topic: Formal stochastic approaches for modelling and verification of dependable and resource-

constrained systems

Grant: 5000 €

## Vanhatupa Juha-Matti

Topic: Tool Support for Game Programming

Grant: 5000 €

## Wang Le

Topic: Energy Efficiency on Mobile devices

Grant: 5000 €

# Wei Lu

Topic: Spectrum Management for Future Wireless Systems

#### **Xu Thomas Canhao**

Topic: myGoogle-on-Chip: Personalized and Shareable Embedded Media Storage System with

Integrated Associative Search

Grant: 5000 €

## **Xue Qiang**

Topic: CO-OP Grant: 5000 €

#### **Yadav Animesh**

Topic: Wireless Systems with Channel Estimation Errors

Grant: 4000 €

# Yao Zhiyuan

Topic: Customer behavior analysis using data mining techniques

Grant: 5000 €

## Ylipulli Johanna Maria

Topic: Adoption and Meanings of Ubiquitous Technology in Northern Urban Space

Grant: 5000 €

## Yu Oi

Topic: New Machine learning methods for Failure and Bankruptcy Prediction

Grant: 5000 €

#### Yucetas Mikail

Topic: Electronic interface design for underdamped MEMS accelerometers

Grant: 5000 €

## **Zheng Wukui**

Topic: A novel structure DMFC for portable electronics systems

Grant: 5000 €

## **Zheng Zhong**

Topic: Theoretical and practical challenges of extremely small underlay cells

Grant: 5000 €

## Zhu Zijian

Topic: High dynamic range imaging

Grant: 5000 €

# 2010

## Aflaki Beni Payman

Topic: Asymmetric stereoscopic video coding

#### **Aho Timo Markus**

Topic: Multi-Target Rule Ensemble Prediction

Grant: 5000 €

## Airola Antti Johannes

Topic: Machine learning for intelligent matching and knowledge discovery

Grant: 5000 €

#### **Airoldi Roberto**

Topic: Design of a Highly-parallel Heterogeneous MP-SoCs for Future Wireless Technologies

Grant: 5000 €

# Ajanki Antti Olavi

Topic: Proactive Information Retrieval in Desktop and Mobile Environments

Grant: 5000 €

# **Andreev Sergey**

Topic: Energy Efficiency Optimization for Modern Wireless Networks

Grant: 5000 €

#### **Babar Abdul Ali**

Topic: Design Techniques and Development of Miniaturized Embedded Antennas for Intelligent RFID

Systems and Wireless Sensor Networks.

Grant: 5000 €

# **Björninen Toni Markus**

Topic: Development of Reliable and Cost Effective Tag Antennas for Passive Far Field RFID Systems

Grant: 5000 €

## **Boev Atanas Rumenov**

Topic: Quality measurement and visual optimization for 3D displays

Grant: 5000 €

## **Bordallo López Miguel**

Topic: Designing for image-based 3D interactivity

Grant: 5000 €

# **Brumley Billy**

Topic: Cache-timing attack countermeasures

Grant: 5000 €

# **Chen Minjie**

Topic: Statstical Methods for Image Denoising and Compression

Grant: 5000 €

#### Costa Mário

Topic: Contributions to Signal Processing for Sensor Arrays of Arbitrary Geometry and Wavefield

Modeling Grant: 5000 €

## **Curcio Igor Danilo Diego**

Topic: QoS Issues in Mobile Multimedia Applications

## **Della Rosa Francescantonio**

Topic: Hybrid Positioning Solutions for Heterogeneous Mass Market Receivers

Grant: 5000 €

# **Eirola Otto Emil**

Topic: Causality and Ensemble Techniques for Environmental Modelling of the Baltic Sea

Grant: 5000 €

## **Gamper Hannes**

Topic: Interactive audio augmented reality

Grant: 5000 €

# **Guang Liang**

Topic: Hierarchical Agent Monitoring Design Platform for Adaptive Parallel Embedded Computing

Grant: 5000 €

#### **Hekkala Atso Eelis**

Topic: Compensation of Nonlinear Transmitter in Distributed MIMO Systems

Grant: 5000 €

# Hiipakka Marko Tapio

Topic: Modeling of peripheral hearing for spatial sound and headphone applications

Grant: 5000 €

#### **Huttunen Arttu Kalevi**

Topic: Integrated microwave sensors for portable devices

Grant: 5000 €

#### **Hu Feng**

Topic: LOCON 2010

Grant: 5000 €

## Ihamäki Pirita Johanna

Topic: Geocaching and Treasure Hunt Concept: Designing and Understanding Player Experience

Doctoral dissertation

Grant: 5000 €

## **Ilvonen Janne Tapio**

Topic: Reduction of User Effect on Mobile Terminals

Grant: 5000 €

## Janhunen Janne Juhani

Topic: Software Defined Radio for the Next Generation Telecommunication Systems

Grant: 5000 €

## **Jurmu Marko Tapio Johannes**

Topic: Discover, lease and distribute: Decentralized middleware-level resource management for

interactive public displays towards distributed & composable applications.

Grant: 5000 €

#### Juuso Ilkka Aarne Olavi

Topic: Advanced visualization techniques for large-scale multimodal linguistic data collections

## Kamali Maryam

Topic: Formal Methods for Analysis of Wireless Sensor Networks

Grant: 5000 €

# Karikoski Juuso Olli Aleksi

Topic: Empirical analysis of mobile social media service usage and social network formation

Grant: 5000 €

# Kellomäki Tiiti Marja Helena

Topic: Specific problems associated with wearable antennas

Grant: 5000 €

#### **Ketonen Johanna Maarit**

Topic: Implementation aspects of MIMO-OFDM receivers

Grant: 5000 €

## Kilamo Terhi

Topic: Forging Open Source Communities

Grant: 5000 €

#### Korhonen Kirsi

Topic: Defect management and agile transformation

Grant: 5000 €

### Kukka Hannu Pekka

Topic: Urban Computing: Ubiquitous and Pervasive Computing in Urban Smart Spaces

Grant: 5000 €

#### Kuuskeri Janne Kalevi

Topic: Towards unified development model for web applications

Grant: 5000 €

## Kyrö Mikko Ville

Topic: Millimeter wave propagation and antennas for communication systems

Grant: 5000 €

## **Laanti Maarit Annele**

Topic: Dissufion of Agile Methods

Grant: 5000 €

## **Latif Khalid**

Topic: Design Methodology for Scalable and Application independent MPSoC platforms

Grant: 5000 €

## Levanen Toni Aleksi

Topic: Iterative Receiver Algorithms for Future Mobile Communications with Superimposed

Structures Grant: 5000 €

## Lilja Kaisa Elina

Topic: Printed Organic Diodes and their Applications

#### Marttila Jaakko

Topic: Advanced Quadrature Sigma-Delta Modulators for Cognitive Radio Analog-to-Digital Interface Grant: 4000 €

### Morais de Lima Carlos Héracles

Topic: Opportunistic Resource and Network Management in Autonomous Packet Access Systems Grant: 5000 €

# Nurkka Piia Eliisa

Topic: The notion of user values in user experience – tools for design

Grant: 5000 €

#### **Oborina Alexandra**

Topic: System level optimization in wireless communications

Grant: 5000 €

#### Pennanen Harri Pekka

Topic: Resource Management with Coordinated Multi-Point Transmission for LTE-Advanced

Grant: 5000 €

# Penttinen Jyrki Teppo Juho

Topic: The Planning and Optimisation of DVB-H Radio Network

Grant: 2000 €

#### Perttula Arttu Turkka Ilmari

Topic: Collective experience in co-creational spaces through mobile devices

Grant: 5000 €

#### Piri Esa Juhani

Topic: Minimizing network service interruptions caused by mobility in heterogeneous broadband

wireless networks Grant: 5000 €

#### RahmaniSane AmirMohammad

Topic: Power Analysis and Optimization in 3D-Networks on Chip

Grant: 5000 €

#### Raitio Tuomo Johannes

Topic: Hidden Markov Model-Based High-Quality Speech Synthesis Based On Physiological Modeling

of Human Voice Production Mechanism

Grant: 5000 €

#### **Rauf Irum**

Topic: Contract based Testing of REST Web Service Compositions Using Models

Grant: 5000 €

## Razavi Seyed Alireza

Topic: Application of Stochastic Complexity in Signal Processing

Grant: 5000 €

#### Rousi Rebekah Ann

Topic: What is User Experience? The user psychology of experiencing design from a cross-cultural

semiotic perspective

Grant: 5000 €

#### Räihä Outi Kristiina

Topic: Meta-heuristic search algorithms in software architecture design

Grant: 5000 €

## Räsänen Okko Johannes

Topic: Unsupervised and Weakly Supervised Methods for Computational Modeling of Language

Acquisition Grant: 5000 €

#### Saeidi Rahim

Topic: Discriminative Speaker and Language Recognition

Grant: 5000 €

#### Santala Olli Henrik

Topic: Spatial sound perception and its binaural auditory modeling

Grant: 5000 €

#### Siirtola Pekka Juhani

Topic: Human action and activity recognition based on the data of wearable inertial sensors: Methods

and applications Grant: 5000 €

# Silen Hanna Margareeta

Topic: Development of Improved Corpus-Based Text-to-Speech Methods

Grant: 5000 €

## Sirén Jouni Leo Tapio

Topic: Compressed Full-Text Indexes for Highly Repetitive Collections

Grant: 5000 €

## Su Xiang

Topic: Lightweight Data Exchange and Service Discovery for Pervasive Environments

Grant: 5000 €

#### Takala Tommi Juhani

Topic: Model-Based Testing: Industrial Case Studies

Grant: 5000 €

## Tervo Juho Sakari

Topic: Estimation of Reflective Surfaces in Concert Halls

Grant: 5000 €

#### Valtonen Miika Antero

Topic: User-centered Measurement and Control Methods for Intelligent Environments

Grant: 5000 €

## van Heeswijk Mark

Topic: Scalable Machine Learning Algorithms on Massively Parallel Architectures

## Vihavainen Sami Kalle Mikael

Topic: Humans and automation – toward useful collaboration in mobile social applications

Grant: 5000 €

## **Vuokko Niko Taneli**

Topic: Significance Testing of Complex Null Hypotheses in Data Mining

Grant: 5000 €

## Weeraddana Pradeep Chathuranga

Topic: Opportunistic Radio Resource Management and Scheduling Methods for Ofdma Wireless

Networks Grant: 3000 €

#### Xiao Yu

Topic: Energy-awareness in mobile computing

Grant: 5000 €

## **Xu Thomas Canhao**

Topic: myGoogle-on-Chip: Personalized and Shareable Embedded Media Storage System with

Integrated Associative Search

Grant: 5000 €

## Yang Bo

Topic: MicroOS: Operating System for Many-Core Reconfigurable Network-on-Chips (NoCs)

Grant: 5000 €

#### **Yilmaz Osman Nuri Can**

Topic: Self-organization of future wireless networks

Grant: 5000 €

#### Yu Chia-Hao

Topic: Opportunistic Mobile Relaying and Agile Resource Usage via Device-to-Device Communication

for Cooperative Wireless Communications

Grant: 5000 €

#### Yücetas Mikail

Topic: Sensor Interface Electronics for MEMS

Grant: 5000 €

#### **Zhang Jie**

Topic: Physical Layer Algorithms in ubiquitous location and Navigation in the future

Telecommunication (PLANT)

Grant: 5000 €

# 2009

#### **Ahtinen Hanna-Leena Aino Maria**

Topic: User-Centered Design of Mobile Wellness Applications

Grant: 5000 €

#### Airoldi Roberto

Topic: Exploration of Multi-Processor System-on-Chip solutions for Software Defined Radio

Applications Grant: 5000 €

## Aittomäki Tuomas Otto Juhanpoika

Topic: Waveform Diversity in Multiantenna Systems

Grant: 5000 €

#### Allen Mark Lee

Topic: Utilization of Inorganic Nanomaterials in Printed Electronics

Grant: 5000 €

## **Bhuiyan Mohammad Zahidul Hasan**

Topic: Analysis of Multipath Mitigation Algorithms for Satellite-based Positioning

Grant: 5000 €

## **Björne Jari Kristian**

Topic: Extraction of Scientific Knowledge from Textual and Experimental Data

Grant: 5000 €

## **Brumley Billy**

Topic: Cache-timing attack countermeasures

Grant: 5000 €

## **Casey Thomas Robert**

Topic: The Value Network Dynamics and Evolution of Mobile Access Provisioning

Grant: 5000 €

### **Chaudhari Sachin**

Topic: Cognitive Radios for Opportunistic Use of Radio Spectrum

Grant: 5000 €

### **Dahlin Andreas Vilhelm**

Topic: Energy efficient scheduling of software for heterogeneous embedded systems

Grant: 5000 €

## **Daneshtalab Masoud**

Topic: Topology Formation and Routing Protocol in Three-Dimensional Network on Chips

Grant: 5000 €

### **Dubrovin Jori Juhani**

Topic: Software Model Checking

Grant: 5000 €

## **Eloranta Veli-Pekka Tapio**

Topic: Creating and Evaluating Software Architectures in Machine Industry

Grant: 5000 €

#### **Ervasti Mari Anne**

Topic: User Experience and Acceptance of Ubiquitous Mobile Services - Case Studies with Special

User Groups Grant: 5000 €

## **Guang Liang**

Topic: Power-Efficient and Dependable Parallel SoCs with Hierarchical Monitoring Services

Grant: 5000 €

## Hakala Risto Matti

Topic: Analysis of Symmetric Encryption Primitives

Grant: 5000 €

### Heikkinen Mikko Ville Juhani

Topic: Techno-Economic Analysis of Mobile Peer-to-Peer Services and Technologies

Grant: 5000 €

### **Holm Jukka Antero**

Topic: Visualizing music collections

Grant: 5000 €

## **Hornsby Adrian**

Topic: Multimedia System Enhancements for Wireless Networks

Grant: 5000 €

#### Husso Mika Juhani

Topic: Technical and economic challenges in femtocell mass deployment

Grant: 5000 €

## Hyvärinen Antti Eero Johannes

Topic: Constraint-Based Search in Computational Grids

Grant: 5000 €

### **Ilvonen Janne**

Topic: Reduction of User Effect on Mobile Terminals

Grant: 5000 €

## Jääskeläinen Pekka Olavi

Topic: Flexible Design Methodologies for Application Specific Processors

Grant: 5000 €

## **Kaseva Ville Antero**

Topic: Ambient Positioning on Resource Constrained Wireless Sensor Networks

Grant: 5000 €

### **Kaufman Brett**

Topic: Spectrum Sharing Techniques for Next Generation Cellular Networks

Grant: 5000 €

## Kohonen Oskar Kalevi

Topic: Unsupervised learning of structure in natural language utterances

Grant: 5000 €

#### Kokko Kati Hannele

Topic: Study of conformal coatings in electronics and their impact on electronics reliability

Grant: 5000 €

### Komulainen Jere Johannes

Topic: Modular multi-FPGA computing platform

Grant: 5000 €

## **Kondrad Lukasz**

Topic: Advanced Joint Source Channel Coding for Video Data Transmission

Grant: 5000 €

## Korhonen Hannu Juhani

Topic: Evaluating Playability of Mobile Games with Expert Review Method

Grant: 5000 €

## Kreku Jari Tapio

Topic: Early-phase performance evaluation of computer systems using workload models and

SystemC Grant: 5000 €

#### Kukka Hannu Pekka

Topic: Urban Computing: Ubiquitous and Pervasive Computing in Urban Smart Spaces

Grant: 5000 €

## Kuparinen Liisa Viivi Marjukka

Topic: Spatial Aspects in the Design of Virtual Map Services

Grant: 5000 €

#### Kuuskeri Janne Kalevi

Topic: Partitioning Web Applications Between the Client and the Server

Grant: 5000 €

### **Latif Khalid**

Topic: Design and Implementation of Scalable and Application independent MPSoC platform.

Grant: 5000 €

### **Lehtonen Eero Lennart**

Topic: Nanoscale Computing in Highly Parallel Array Structures

Grant: 5000 €

## Li Jin

Topic: Advances on video coding algorithms for mobile applications

Grant: 5000 €

## Liikkanen Lassi Antero

Topic: Psychological functions of memory in interacting with music

Grant: 5000 €

## Liitiäinen Elia Ilmari

Topic: Statistical Estimation of Dependencies

Grant: 5000 €

## Linja-aho Martti \_Vesa\_ Olavi

Topic: Combinatorial algorithms for NP-hard problems

Grant: 5000 €

## Liu Yong

Topic: Exploring factors driving users' adoption of mobile learning

Grant: 5000 €

## Lorenzo Veiga Beatriz

Topic: Advanced Radio Resource Management for Cellular Networks

Grant: 5000 €

## **Malamal Vadakital Vinod Kumar**

Topic: Advanced Video Signal Processing for Video Streaming to Mobile Terminals

Grant: 5000 €

#### **Miettinen Pekka**

Topic: Model-order Reduction in Circuit Theory and Electromagnetics

Grant: 5000 €

### Morais de Lima Carlos Héracles

Topic: Dynamic Resource Management in Autonomous Packet Access Systems

Grant: 5000 €

## Mäntymäki Matti

Topic: Customer Loyalty is Social Virtual Worlds

Grant: 5000 €

#### **Nieminen Jari Armas**

Topic: Time Synchronization of Cognitive Radio Networks

Grant: 5000 €

#### **Nonchev Stanislav Petromilov**

Topic: Advanced Radio Resource Management for Future Multi-User, Multi-Antenna Packet Radio

Systems Grant: 5000 €

## **Nousiainen Jarno Eero Tapani**

Topic: Forwarding capacity of a large wireless network

Grant: 5000 €

## **Ojala Markus Raito Nikolai**

Topic: Algorithmic Aspects of Randomization Methods for Data Mining

Grant: 5000 €

### **Ou Zhonghong**

Topic: Novel Energy-Efficient Enabling Techniques for Mobile Peer-to-Peer Networking over

Heterogeneous Networks

Grant: 5000 €

## **Pajarinen Joni Kristian**

Topic: Adaptive machine learning in cognitive radio systems

## Parviainen Jussi Tapani

Topic: Multi-sensor navigation for land vehicle

Grant: 5000 €

### **Perttunen Mikko Johannes**

Topic: Participatory road condition monitoring using mobile phones

Grant: 5000 €

## Peräntie Jani Tapio

Topic: Electrically induced thermal and structural phenomena in electroceramics

Grant: 5000 €

## Pätynen Jukka Lauri livari

Topic: Modeling of the orchestra instruments in auralization

Grant: 5000 €

#### Radun Jenni Emilia

Topic: High-level image quality experience: What is it and how to measure it?

Grant: 5000 €

### Rantala Ville Tarmo Taneli

Topic: Fault Tolerant Communication Platform for Future 3D Integrated Chips

Grant: 5000 €

## Rapinoja Tapio Ilmari

Topic: An integrated multi-standard frequency synthesizer for cognitive radio applications.

Grant: 5000 €

## Razavi Seyed Alireza

Topic: Application of Stochastic Complexity in Signal Processing

Grant: 5000 €

## Saad-Sulonen Joanna Catherine

Topic: Designing for citizen participation —characteristics and concepts of ICT-mediated participation

in urban issues Grant: 5000 €

#### Samad Md. Farzan

Topic: Enhancing the usability of mobile devices through haptic interaction

Grant: 5000 €

## Sandström Dan, Ilari

Topic: Integrated radio transmitter circuits for millimeter-wave frequencies in CMOS

Grant: 5000 €

#### **Schober Karol**

Topic: Precoding for spatially multiplexed MIMO systems

Grant: 5000 €

## Siirtola Pekka Juhani

Topic: Searching and analyzing meaningful shapes of time series signal

## Singh Varun Ranjit

Topic: Enhance Quality Control in 3G Conversational Video Communication

Grant: 5000 €

## Stirbu Vlad

Topic: User-Centric Web-Based Symbolic Location Information Systems

Grant: 5000 €

### Suutala Jaakko Markus

Topic: Learning Discriminative Models from Structured Multi-sensor Data for Human Context

Recognition Grant: 5000 €

## **Tervo Valtteri Topias**

Topic: Distributed Decision Making for Future Wireless Communication Systems (DIDES)

Grant: 5000 €

## **Tuovinen Lauri Tapio**

Topic: A New Model of the Knowledge Discovery Process Based on a Symbiosis of Humans and

Technology Grant: 5000 €

## **Ugur Kemal**

Topic: Improved Motion Compensated Prediction Methods for Low Complexity, High Quality Video

Coding

Grant: 5000 €

#### Vaddina Kameswar Rao

Topic: STEMCOMS: Self-Timed Thermal Monitoring and Control of Multicore Systems.

Grant: 5000 €

## Vuolle (nee Markova) Anne Maiju

Topic: Evaluating the impacts of mobile business-to-employee services

Grant: 5000 €

## Weeraddana Pradeep Chathuranga

Topic: Opportunistic Radio Resource Management and Scheduling Methods for OFDMA Wireless

Networks Grant: 5000 €

## **Wieringa Siert**

Topic: Distributed SAT-based model checking

Grant: 5000 €

#### Xiao Yu

Topic: Energy-awareness in mobile computing

Grant: 5000 €

#### Ylirisku Salu Pekka

Topic: Framing Conceptual Innovation

# 2008

### Aho Kari Juhani

Topic: Performance and performance enhancements of MBMS and VoIP services in next generation

cellular networks

Host: University of Jyväskylä

Grant: 5000 €

#### **Ahoniemi Tuukka Johannes**

Topic: Efficient Use of Teaching Technologies with Programming Education

Host: Tampere University of Technology

Grant: 5000 €

### Airola Antti Johannes

Topic: Machine learning for intelligent matching and knowledge discovery

Host: University of Turku

Grant: 5000 €

## Aittomäki Tuomas Otto Juhanpoika

Topic: Waveform Diversity in Multiantenna Systems

Host: Helsinki University of Technology

Grant: 5000 €

## **Belimpasakis Petros**

Topic: Content Sharing in Extended Home Host: Tampere University of Technology

Grant: 5000 €

## **Chen Ying**

Topic: Contributions for Scalable and Multiview Extensions to the H.264/AVC

Host: Tampere University of Technology

Grant: 5000 €

### **Davidyuk Oleg**

Topic: User-Centric Composition of Pervasive Applications

Host: University of Oulu

Grant: 5000 €

#### **Garzia Fabio**

Topic: Design of a software environment for the implementation of 3D graphics and multimedia

processing applications on a reconfigurable architecture

Host: Tampere University of Technology

Grant: 5000 €

### **Guzma Vladimir**

Topic: High and low-level scheduling optimizations for embedded systems

Host: Tampere University of Technology

### **Hakala Risto Matti**

Topic: Analysis of Symmetric Encryption Primitives

Host: Helsinki University of Technology

Grant: 5000 €

## Harjula Erkki Aleksander

Topic: Performance and Reliability Optimization of Mobile Structured Peer-to-Peer Networks

Host: University of Oulu

Grant: 5000 €

### Heikinheimo Hannes Antti Herman

Topic: Towards better interpretation and usability of frequent pattern mining results

Host: Helsinki University of Technology

Grant: 5000 €

#### Heikkinen Mikko Ville Juhani

Topic: Techno-Economic Analysis of Mobile Peer-to-Peer Services and Technologies

Host: Helsinki University of Technology

Grant: 5000 €

#### **Helander Elina Elisabet**

Topic: New methods for voice conversion and speech synthesis

Host: Tampere University of Technology

Grant: 5000 €

### Husso Mika Juhani

Topic: Technical and economic challenges in femtocell mass deployment

Host: Helsinki University of Technology

Grant: 5000 €

## Härkönen Janne Tapani

Topic: Managing Verification and Validation Activities in High Tech NPD Process

Host: University of Oulu

Grant: 5000 €

## Höyhtyä Marko Tapio

Topic: Adaptive transmitter and power allocation strategies in a cognitive radio network

Host: University of Oulu

Grant: 5000 €

## Jansson Jussi-Pekka

Topic: High precision CMOS Time-to-Digital Converter

Host: University of Oulu

Grant: 5000 €

## **Jokela Tero Tapio**

Topic: Analysis and performance enhancement of forward error control coding and signaling in

wireless DVB standards Host: University of Turku

## Jumisko-Pyykkö Satu Hannele

Topic: Experience of audiovisual quality - Components and evaluation methods

Host: Tampere University of Technology

Grant: 5000 €

#### Jääskeläinen Pekka Olavi

Topic: Flexible Design Methodologies for Application Specific Processors

Host: Tampere University of Technology

Grant: 5000 €

### Kaltiokallio Mikko Henrik

Topic: Integrated radio frequency circuits for unlicensed radios

Host: Helsinki University of Technology

Grant: 5000 €

#### Kannala Juho

Topic: Geometric methods in computer vision

Host: University of Oulu

Grant: 5000 €

## Kanstrén Teemu Seppo

Topic: Observation Based Modeling for Model Based Testing

Host: University of Oulu

Grant: 5000 €

#### Kantee Antti Oskari

Topic: Operating Systems as Reusable Libraries

Host: Helsinki University of Technology

Grant: 5000 €

## Kellokumpu Vili-Petteri

Topic: Machine Vision for Human Motion Analysis

Host: University of Oulu

Grant: 5000 €

#### Kivistö Samuli Johannes

Topic: Laser transmitters and amplifiers based on novel fiber materials

Host: Tampere University of Technology

Grant: 5000 €

## Korhonen Teemu Samuli

Topic: Tracking of acoustic targets in noisy environment

Host: Tampere University of Technology

Grant: 5000 €

## Koskela Timo Mikko lisakki

Topic: Implementation and Analysis of the Converged and Socially Networked Next Generation

Mobile Services

Host: University of Oulu

## Kropsu-Vehkaperä Hanna Liisa

Topic: Evolution of product structure through product lifecycle - an analysis on product changes

Host: University of Oulu

Grant: 5000 €

#### Laakso Mikko-Jussi

Topic: The effectiveness of automatic assessment and visualization in learning to program

Host: University of Turku

Grant: 5000 €

#### **Lehtonen Eero Lennart**

Topic: Information Theoretic Approach to Positioning and Coding in Multi-User Channels

Host: University of Turku

Grant: 5000 €

## Liu Yong

Topic: Exploring factors driving users' adoption of mobile learning

Host: Åbo Akademi University

Grant: 5000 €

## Luukkonen Olli

Topic: Artificial impedance surface structures and electromagnetic materials

Host: Helsinki University of Technology

Grant: 5000 €

## Macagnano Davide

Topic: Advanced Techniques for Localization and Tracking of Mobile Wireless Radios

Host: University of Oulu

Grant: 5000 €

## Matinmikko Marja Anneli

Topic: Spectrum management in future wireless systems

Host: University of Oulu

Grant: 5000 €

#### Metsä Jani Petteri

Topic: Improving testability using Aspects Host: Tampere University of Technology

Grant: 5000 €

#### Minasyan Susanna

Topic: Fast adaptive parametric transforms based methods in signal processing and logic design

Host: Tampere University of Technology

Grant: 5000 €

## Määttälä Miia Eveliina

Topic: Optical biosensor based on self-mixing interferometry in wireless applications

Host: University of Oulu

Grant: 5000 €

## Määttänen Helka-Liina

Topic: Optimizing gains for MIMO transmission with limited feedback

Host: Helsinki University of Technology

Grant: 5000 €

## **Nigussie Ethiopia Enideg**

Topic: Design and Analysis of High-Performance and Robust On-Chip Interconnects for Nano-Scale

System-on-Chip

Host: University of Turku

Grant: 5000 €

### Nikunen Karri Erkka Elias

Topic: Research for the Calculation Platform made of Wireless Reconfigurable Smart Objects

Host: University of Oulu

Grant: 5000 €

### **Olsson Thomas Daniel**

Topic: User experience in collective content interaction

Host: Tampere University of Technology

Grant: 5000 €

#### **Pedone Matteo**

Topic: Image fusion and restoration: generation of sharp high dynamic range images from a set of

blurred exposures Host: University of Oulu

Grant: 5000 €

#### Pekkanen Jussi Heikki

Topic: Sintering methods of nano particles and utilization of laser in printed electronics applications

Host: Tampere University of Technology

Grant: 5000 €

#### **Pekkanen Ville Risto**

Topic: Inkjet printing technology for electronics manufacturing

Host: Tampere University of Technology

Grant: 5000 €

#### **Peltonen Knut Peter Mauritz**

Topic: Social networking in the wild: mobile technology and identity management

Host: University of Helsinki

Grant: 5000 €

#### **Pennanen Harri**

Topic: Enhanced Radio Resource Management Methods with Coordinated Base Station Antenna

Systems for IMT-Advanced Host: University of Oulu

Grant: 5000 €

### Pitkänen Mikko Juhani

Topic: Delay-tolerant Networking for Multimedia Content Access

Host: Helsinki University of Technology

## Poikonen Jussi Henrikki

Topic: Efficient channel modeling methods for mobile communication systems

Host: University of Turku

Grant: 5000 €

## **Popesco Corina**

Topic: Formal modeling, validation and verification of Service oriented Architecture -based factory

automation systems

Host: Tampere University of Technology

Grant: 5000 €

#### Pottonen Olli Mikael

Topic: Classification of Combinatorial Designs and Codes

Host: Helsinki University of Technology

Grant: 5000 €

#### Pramila Anu Minna Kaarina

Topic: Extracting watermarks with a camera phone or a digital camera from printed images and

holograms

Host: University of Oulu

Grant: 5000 €

#### Pulakka Hannu Juhani

Topic: Digital signal processing methods for the improvement of speech quality and intelligibility in

mobile communication systems

Host: Helsinki University of Technology

Grant: 5000 €

## Rantala Ville Tarmo Taneli

Topic: Intelligent Communication Platform for Future 3D Integrated Chips

Host: University of Turku

Grant: 5000 €

## Rapinoja Tapio Ilmari

Topic: An integrated multi-standard frequency synthesizer for cognitive radio applications

Host: Helsinki University of Technology

Grant: 5000 €

#### Rautio Timo Jaakko

Topic: Linearization and characterization of supply modulated RF-transmitters

Host: University of Oulu

Grant: 5000 €

### Ruusuvuori Pekka Samuli

Topic: New Methods for Automated Image Analysis in Microscale Applications

Host: Tampere University of Technology

Grant: 5000 €

#### Saleemi Muhammad Mohsin

Topic: System Software and Architectural Aspects of Interactive Mobile TV

Host: Åbo Akademi University

### Schumacher André

Topic: Distributed Optimization Techniques for Multihop Wireless Networks

Host: Helsinki University of Technology

Grant: 5000 €

#### Siltanen Samuel Allan

Topic: Real-Time Algorithms for Room Acoustics

Host: Helsinki University of Technology

Grant: 5000 €

## Sjöberg Mats Viktor

Topic: Content- and semantic-based retrieval of multimedia using Self-Organizing Maps

Host: Helsinki University of Technology

Grant: 5000 €

#### **Smura Timo Santeri**

Topic: Techno-economic analysis of alternative mobile broadband access networks

Host: Helsinki University of Technology

Grant: 5000 €

## Sorjamaa Antti Petteri

Topic: Time Series Prediction and Missing Values in Spatio-Temporal Databases

Host: Helsinki University of Technology

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### Suomela Jukka Olavi

Topic: Algorithms for wireless sensor networks

Host: University of Helsinki

Grant: 5000 €

#### **Tamminen Aleksi Arimo**

Topic: Millimeter-wave indirect holographic imaging for security applications

Host: Helsinki University of Technology

Grant: 5000 €

#### Tikka Tero Heikki Tapani

Topic: Integration of radio-frequency circuits for wideband high data-rate radio systems

Host: Helsinki University of Technology

Grant: 5000 €

## **Tirronen Tuomas Juhani**

Topic: Development and analysis of data transfer methods using fountain and erasure coding.

Host: Helsinki University of Technology

Grant: 5000 €

#### Vartiainen Elina Anneli

Topic: Designing user interfaces for mobile Internet-enabled devices

Host: Helsinki University of Technology

Grant: 5000 €

## **Voltti Markus Johannes**

Topic: Digital compensation of device mismatch in analog circuit blocks

Host: University of Turku

Grant: 5000 €

## Voutilainen Juha-Veikko

Topic: Proactive diagnostics of electronics with embedded precursor behaviour monitoring

Host: University of Oulu

Grant: 5000 €

### Ylioinas Jari Vilho

Topic: Iterative joint detection, decoding, and channel estimation in MIMO-OFDM

Host: University of Oulu

Grant: 5000 €

## **Zhang Cixun**

Topic: Advanced video compression techniques for next generation video coding standard

Host: Tampere University of Technology

Grant: 5000 €

## **Zhao Qinpei**

Topic: Cluster analysis and its applications on image and speech processing

Host: University of Joensuu

Grant: 5000 €

# 2007

#### **Aaltonen Lasse Juhani**

Topic: Mikromekaanisten inertiaalianturien integroitu lukuelektroniikka

Grant: 5000 €

#### **Ahonen Timo Juhani**

Topic: Tekstuurimenetelmien kehitys ja soveltaminen luonnollisten kuvien analysointiin

Grant: 5000 €

## Aho Kari Juhani

Topic: Performance enhancements on WCDMA and HSPA networks

Grant: 5000 €

## Ali-Löytty Simo Sakari

Topic: Luotettavien aikasarja-algoritmien kehittäminen henkilökohtaiseen paikannukseen

Grant: 5000 €

## Alitalo Pekka Heikki Antero

Topic: Sub-wavelength sensing based on metamaterials and resonating structures

Grant: 5000 €

## **Arpinen Tero Antti Mikael**

Topic: Järjestelmätason mallinnusmenetelmät ja automaatio sulautetun elektroniikan suunnittelussa

### **Bennis Mehdi**

Topic: Novel Approaches to Improve Radio Networks Efficiency

Grant: 5000 €

## **Boutellier Jani Joosefi**

Topic: New Paradigms for Embedded Computing Systems

Grant: 5000 €

## **Destino Giuseppe**

Topic: Localization Algorithms and Cross-Layer Optimization for Location-Aware Wireless Networks

Grant: 5000 €

## **Geng Suiyan**

Topic: Experimental Investigation of Future High Throughput Radios

Grant: 5000 €

#### **Ghaboosi Kaveh**

Topic: Cognitive Medium Access Control Protocols for the Next Generation Wireless Network

Grant: 5000 €

## Haapalainen Eija Marika

Topic: Time series modeling in intelligent data mining applications - Model and parameter selection

and update Grant: 5000 €

## Haapio Topi

Topic: Improving Effort Management in Software Development Projects

Grant: 5000 €

### Hakokari Jussi Veijo

Topic: Enhancing Applicability of Speech Technology using Core Speech Approach

Grant: 5000 €

#### Hannu Jari Johannes

Topic: Elektroniikan sulautettu testaus levy- ja järjestelmätasolla

Grant: 5000 €

#### **Helander Elina Elisabet**

Topic: New methods for voice conversion

Grant: 5000 €

## Hietakangas Simo, Sakari

Topic: Käyttöjännitemoduloitujen RF-tehovahvistimien fyysisten rakenteiden ja

suunnittelumenetelmien kehittäminen.

Grant: 5000 €

#### Himmanen Heidi Johanna

Topic: Langattomien tiedonsiirtojärjestelmien järjestelmäsuunnittelun uudet metodit (New Approach

on Wireless Communication Systems Design: a case study on mobile broadcasting)

Grant: 5000 €

## **Holopainen Juha**

Topic: Älykkyys emergenteissä järjestelmissä

Grant: 5000 €

#### Härmä Sanna Katariina

Topic: Akustisiin pinta-aaltoihin perustuvan RFID-tunnisteen suunnittelu

Grant: 5000 €

#### **Ihalainen Tero Johannes**

Topic: Spectrally and Power Efficient Waveforms for Future Cellular Systems

Grant: 5000 €

## **Jokela Tero Tapio**

Topic: Väitöskirja: "Virheenkorjauksen suunnittelu ja tehokkuuden arvioiminen sekä parantaminen

erilaisissa tiedonsiirto- ja piiritason sovelluksissa"

Grant: 5000 €

### Jokisuu Elina Inkeri

Topic: Sosiaalinen media ikäihmisten yhteisöllisyyden edistäjänä

Grant: 5000 €

#### **Juva Aarne Anton Ilmari**

Topic: Liikennematriisin estimointi

Grant: 5000 €

#### Järvisalo Matti Juhani

Topic: Rakenteisten kombinatoristen ongelmien ratkaisumenetelmät

Grant: 5000 €

## Kaija Kimmo Kalevi

Topic: Mikroelektroniikan pakkaustekniikan laskennallinen mallintaminen

Grant: 5000 €

### Kaltiokallio Mikko Henrik

Topic: Lisensoimattomat integroidut radiotaajuusetupääpiirit

Grant: 5000 €

## Kannala Juho Tapani

Topic: Geometriset menetelmät tietokonenäössä

Grant: 5000 €

## **Kassinen Otso Atte**

Topic: Novel Solutions for Session Management in Hybrid Peer-to-Peer Systems (väitöskirjan alustava

otsikko)

Grant: 5000 €

## Kiuru Tero Tapani

Topic: Millimetriaaltoalueen komponenttien tutkimus ja mallinnus

Grant: 5000 €

#### Kivistö Samuli

Topic: Uudenlaisiin optisiin kuitumateriaaleihin perustuvat laserlähettimet ja vahvistimet

## Kokkonen Kimmo Niklas Olavi

Topic: Phase sensitive measurements of surface vibrations using scanning heterodyne laser

interferometry Grant: 5000 €

### Kokko Kati Hannele

Topic: Elektroniikan miniatyrisointi lääketieteellisissä sovelluksissa

Grant: 5000 €

### Kolmonen Veli-Matti

Topic: Semi-automatic radio channel parameter extraction

Grant: 5000 €

#### Komulainen Mikko Sakari

Topic: Säätötekniikat tulevaisuuden tietoliikenneantenneissa

Grant: 5000 €

## Koponen Teemu Matti Johannes

Topic: Data-Oriented (and Beyond) Network Architecture

Grant: 5000 €

## **Kotilainen Niko**

Topic: Mobiililaitteiden liikkuvuuden hyödyntäminen reitityksessä

Grant: 5000 €

## Kujala Jussi Antero

Topic: Efficient learning and limits in online problems with focus on binary search trees

Grant: 5000 €

## Lahtinen Essi Maaria

Topic: Ohjelmoinnin perusteiden oppimisen ongelmat ja niiden helpottaminen visualisointien avulla

Grant: 5000 €

#### Lehtonen Heidi-Maria

Topic: Analysis, Perception, and Synthesis of Piano Tones

Grant: 5000 €

## Lehtonen Teijo Tapani

Topic: Tulevaisuuden nanoskaalaisten sirujen suunnittelu vikasietoisiksi

Grant: 5000 €

## Leino Juha Mikael

Topic: Stokastisia menetelmiä tietoverkkojen suorituskykyanalyysiin

Grant: 5000 €

#### **Lindqvist Janne Kari Olavi**

Topic: Privacy Protection Mechanisms for Networked Society

Grant: 5000 €

#### Li Jin

Topic: Hybrid audio/video coding for audiovisual synchronization in multimedia systems

## Lundén Jarmo Rafael

Topic: Spectrum sensing for cognitive radio and radar

Grant: 5000 €

## **Lundkvist Torbjörn**

Topic: Definition of Visual Language Editors Using Declarative Languages

Grant: 5000 €

### Luukkonen Olli

Topic: Keinotekoisten impedanssipintojen mallintaminen ja niiden sovellukset millimetriaaltoalueella

Grant: 5000 €

## **Magi Carlo Oreste**

Topic: Uudet matemaattiset mallit puheen spektraaliseen mallintamiseen

Grant: 5000 €

### **Malamal Vadakital Vinod Kumar**

Topic: ADVANCED VIDEO SIGNAL PROCESSING FOR MOBILE TELEVISON OVER DVB CHANNELS

Grant: 5000 €

## Marghescu Dorina

Topic: Evaluation of visual data mining techniques

Grant: 5000 €

## Markova Anne Maiju

Topic: Yritysten mobiilipalvelujen hyödyllisyyden arviointi

Grant: 5000 €

## Matinmikko Marja Anneli

Topic: IMT-Advanced-järjestelmien taajuustarpeet

Grant: 5000 €

### Maunu Janne

Topic: Erittäin nopea ja vähän tehoa kuluttava analoginen Viterbi-dekooderi

Grant: 5000 €

## Mustonen Maria Tuulikki

Topic: Monielementtiset antennitekniikat tulevaisuuden radiojärjestelmiin

Grant: 5000 €

#### **Mustonen Tero Johan**

Topic: Nanoelectronics with functionalized carbon nanotube architectures

Grant: 5000 €

#### Mäkelä Jukka Petteri

Topic: Mobility Management in Future Converging Networks

Grant: 5000 €

#### Möttönen Matti Juhani

Topic: Testing optimization in high technology production

### **Neovius Mats Ivar Olof**

Topic: Formal Reasoning about Context Dependent Distributed Systems

Grant: 5000 €

## **Nigussie Ethiopia Enideg**

Topic: Design and Analysis of High-Performance and Robust On-Chip Interconnects for Nano-Scale

System-on-Chip Grant: 5000 €

### Nissinen Jan Juhani

Topic: Optisia CMOS-vastaanotinkanavia lasertutkan integroituun vastaanottimeen

Grant: 5000 €

### **Oborina Alexandra Leonidovna**

Topic: System level optimization in wireless communications

Grant: 5000 €

## Ojansivu Ville Pertti Johannes

Topic: Sumentumiselle invariantti hahmontunnistus käyttäen Fourier muunnokseen perustuvia

piirteitä

Grant: 5000 €

#### Partala Juha Pekka

Topic: Epäassosiatiivisen algebran soveltaminen tiedon salaukseen

Grant: 5000 €

#### **Pekkanen Ville Risto**

Topic: Additiivisten valmistusmenetelmät elektroniikkatuotannossa

Grant: 5000 €

#### Plaska Marta

Topic: Measurement of the impact of formal methods in software development process

Grant: 5000 €

#### Poikonen Jussi Henrikki

Topic: Langattomien tietoliikennejärjestelmien hierarkiset kanavamallit

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## Pulakka Hannu Juhani

Topic: Matkapuhelinpuheen laadun ja ymmärrettävyyden parantaminen signaalinkäsittelyn avulla

Grant: 5000 €

## Puska Henri Tapani

Topic: Adaptiivista antenniryhmää hyödyntävät häiriönvaimennus- ja koodisynkronointimenetelmät

Grant: 5000 €

#### Riihonen Pekka Taneli Matias

Topic: Edistykselliset välitinkonseptit tulevaisuuden langattomissa viestinjärjestelmissä

Grant: 5000 €

## **Ruokonen Anna Kristiina**

Topic: Model-Driven Development of Web Services Systems

#### Salmi Jussi Samuel

Topic: MIMO radiokanavamallin parametrien estimointi tila-avaruus menetelmin

Grant: 5000 €

### **Seuranen Esa Antero**

Topic: Koodien konstruoiminen stokastisilla optimointimenetelmillä

Grant: 5000 €

## Sievilä Päivi

Topic: Nanorakenteiden optiset ominaisuudet

Grant: 5000 €

## Sjöberg Mats Viktor

Topic: Content- and semantic-based retrieval of multimedia using Self-Organizing Maps

Grant: 5000 €

## **Skoyrnetoy Danai**

Topic: Robust Methods for Tracking Low CNR GNSS Signals

Grant: 5000 €

## Vanhatupa Timo Juhani

Topic: Langattomien paikallisten tiedonsiirtoverkkojen hallinta

Grant: 5000 €

## Varonen Mikko Juhani

Topic: Millimetriaaltoalueen radiojärjestelmien piirien integrointi

Grant: 5000 €

### Vartiainen Elina Anneli

Topic: User interface design and implementation for mobile Internet-enabled devices

Grant: 5000 €

## Verkasalo Hannu

Topic: Handset-Based Mobile Service Research

Grant: 5000 €

## Vesa Sampo Ville

Topic: Auditory Environment Analysis - Applications and Methods

Grant: 5000 €

#### Virtanen Kati Pauliina

Topic: Erittäin vähän tehoa kuluttava videonpakkauslaitteisto kannettaville laitteille

Grant: 5000 €

## Väyrynen Jaakko Johannes

Topic: Rakenteiden ohjaamaton oppiminen luonnollisesta aineistosta ja soveltaminen

konekääntämiseen

Grant: 5000 €

## Yaning zou

Topic: Advanced DSP Techniques for Mitigation of Analog Front-End Impairments in Future Wireless

Transceivers Grant: 5000 €

# 2006

## **Aaltonen Lasse Juhani**

Topic: Suuriresoluutioisen mikromekaanisen kiihtyvyysanturin integroitu lukuelektroniikka

Grant: 5000 €

## **Abrudan Traian Emanuel**

Topic: Advanced receivers for multicarrier systems in wireless communications

Grant: 5000 €

## Alanen Marcus Sakari

Topic: Ohjelmistomallintamisen perusteet ja käytäntö Object Management Groupin standardeilla

Grant: 5000 €

## Alanen Olli Petteri

Topic: IPTV-palveluiden laadun hallinta ja tarkkailu tulevaisuuden tietoverkoissa

Grant: 5000 €

## Alitalo Pekka Heikki Antero

Topic: Sub-wavelength sensing based on metamaterials and resonating structures

Grant: 5000 €

## **Belloni Fabio**

Topic: Small Antenna Arrays for Multiantenna Communications

Grant: 5000 €

## **Bennis Mehdi**

Topic: Novel Approaches to Improve Radio Networks Efficiency

Grant: 5000 €

## **Brunelli Claudio**

Topic: AVEC Grant: 5000 €

#### **Del Rosso Christian**

Topic: Continuous Evolution Through Software Architecture Evaluation

Grant: 5000 €

## **Destino Giuseppe**

Topic: Real-time multimedia traffic delivery and management

Grant: 5000 €

#### Frisk Laura Katriina

Topic: Johtavalla liimalla liitettyjen flip chip -komponenttien pitkäaikaisluotettavuus orgaanisilla

liitosalustoilla Grant: 5000 €

#### Ghaboosi Kaveh

Topic: Medium Access Control in Cognitive Radio and Spectrum Agile Wireless Networks

Grant: 5000 €

## **Goratti Leonardo**

Topic: Medium Access Control Protocol design for UWB based networks: high and low rates

Grant: 5000 €

## **Gregorio Fernando Hugo**

Topic: Power Amplifier Nonlinearities in Multiantenna Systems

Grant: 5000 €

## Haapola Jussi-Pekka

Topic: Medium Access Control Protocols for Wireless Sensor Networks (Langattomien

sensoriverkkojen linkkiohjausprotokollat)

Grant: 5000 €

## Hankaniemi Mikko Matias

Topic: Teholähteiden karakterisointi

Grant: 5000 €

## Hannu Jari Johannes

Topic: Elektroniikan sulautettu testaus levy- ja järjestelmätasolla

Grant: 5000 €

## Heikkilä Marko Tapio

Topic: UUSIA TEKSTUURIPOHJAISIA MENETELMIÄ KONENÄKÖÖN

Grant: 5000 €

## Hietakangas Simo Sakari

Topic: Käyttöjännitemoduloitujen RF-tehovahvistimien fyysisten rakenteiden ja

suunnittelumenetelmien kehittäminen

Grant: 3000 €

#### Himmanen Heidi Johanna

Topic: Efficient development of mobile standards: a case study on DVB-H

Grant: 5000 €

## Hirsimäki Teemu Elias

Topic: Menetelmiä automaattisen puheentunnistuksen tehostamiseen

Grant: 5000 €

## Holopainen Jari Petteri

Topic: Monisysteemiradioiden antennit

Grant: 5000 €

#### Härmä Sanna

Topic: Akustisiin pinta-aaltoihin perustuvan RFID-tunnisteen rakenteen optimointi

#### **Ihalainen Tero Johannes**

Topic: Spectrally and Power Efficient Waveforms for Future Cellular Systems

Grant: 5000 €

## Ikonen Pekka Martti Tapio

Topic: Artificial composite structures in selected microwave applications

Grant: 5000 €

## Jiang Juanjuan

Topic: Technics and tool-supports for improving Web Services interoperability

Grant: 5000 €

## Jylhä Juha Matias

Topic: Outlier analysis in statistically varying signal

Grant: 5000 €

### Järvinen Kimmo Uolevi

Topic: Salausalgoritmien laitteistokiihdytys

Grant: 5000 €

## Kaija Kimmo Kalevi

Topic: Väitöskirjatyö: Mikroelektroniikan pakkaustekniikan laskennallinen mallintaminen

Grant: 5000 €

## Kokkonen Kimmo Niklas Olavi

Topic: Phase sensitive measurements of surface vibrations using scanning heterodyne laser

interferometry Grant: 5000 €

## Kolmonen Veli-Matti

Topic: Semi-automatic radio channel parameter extraction

Grant: 5000 €

#### Komulainen Mikko Sakari

Topic: Säätötekniikat tulevaisuuden tietoliikenneantenneissa

Grant: 5000 €

### **Kujala Jussi Antero**

Topic: Advancements in the efficient use of past information in data structures, discretization, and

online learning Grant: 5000 €

#### Kulmala Ari Tapani

Topic: Joustava ja skaalautuva arkkitehtuuri digitaalisille järjestelmille

Grant: 5000 €

#### **Kurhinen Jani Kristian**

Topic: Informaation välittyminen infrastruktuurittomassa mobiiliympäristössä

Grant: 5000 €

## Lahdenoja Olli Antero

Topic: Kasvontunnistus käyttäen massiivisia rinnakkaisia prosessoriarkkitehtuurej

#### Lahtinen Essi Maaria

Topic: Ohjelmoinnin perusteiden oppimisongelmat ja opiskelijoiden tukeminen visualisointien avulla

Grant: 5000 €

## **Lahtinen Samuel Pellervo**

Topic: (Meta)mallipohjaiset äänikielet

Grant: 5000 €

### Leino Juha Mikael

Topic: Stokastisia menetelmiä tietoverkkojen suorituskykyanalyysiin

Grant: 5000 €

#### **Lundén Jarmo Rafael**

Topic: Spectrum sensing in cognitive radio and radar

Grant: 5000 €

## Löytynoja Mikko Johannes

Topic: DRM- ja digitaaliset vesileimaustekniikat mobiililaitteissa

Grant: 5000 €

#### Mansikkamäki Satu Pauliina

Topic: Technology Development Process for New Manufacturing Technologies -Case Studies

Grant: 5000 €

## Maunu Janne

Topic: Erittäin nopea ja vähän tehoa kuluttava analoginen Viterbi-dekooderi

Grant: 5000 €

### **Mustonen Tero Johan**

Topic: Nanoelectronics with functionalized carbon nanotube architectures

Grant: 5000 €

### Mäkilä Tuomas Sulo Toivo

Topic: Software Development Process Modeling

Grant: 5000 €

## **Neovius Mats Ivar Olof**

Topic: Formal Reasoning about Distributed Systems

Grant: 5000 €

#### Nissinen Ilkka Kristian

Topic: Integroituun monivaiheiseen CMOS-rengasoskillaattoriin perustuvia aika-digitaali -

muunninratkaisuja laseretäisyysmittalaitteen integroituun vastaanottimeen

Grant: 5000 €

#### **Nybom Kristian Gustav**

Topic: Application Layer Multidimensional Forward Error Correcting Codes in Wireless Networks

Grant: 5000 €

## Pahikkala Aarne Tapio

Topic: Koneoppimismenetelmät kieliteknologian apuna

#### **Perttunen Mikko Johannes**

Topic: Knowledge representation in context-aware systems

Grant: 5000 €

## Pikkarainen Minna Annika

Topic: Agile software methodology deployment in organizations

Grant: 5000 €

## Pänkäälä Mikko Tapani

Topic: Ultra Low-Power Video Compression System for Mobile Devices

Grant: 5000 €

## **Qu Yang**

Topic: Using parallel configuration models and optimized prefetch scheduling techniques to reduce

the run-time reconfiguration overhead (PARACOM)

Grant: 5000 €

### **Rabbachin Alberto**

Topic: Low complexity and low data rate receivers for UWB systems with location and tracking

capabilities. Grant: 5000 €

#### Raisamo Jukka Martti Kalevi

Topic: Interaction Methods in Haptic Environments

Grant: 4000 €

## Rajala Risto Veli Matti

Topic: BUSINESS MODEL TRANSFORMATION IN SOFTWARE FIRMS

Grant: 5000 €

#### **Ranto Sanna Maarit**

Topic: Identifioivat koodit Hammingin avaruudessa

Grant: 5000 €

## Rauhala Jukka Vesa Tapani

Topic: Parametric piano synthesis

Grant: 5000 €

## Rautio Timo Jaakko

Topic: Käyttöjännitemoduloitujen RF-tehovahvistimien linearisointi

Grant: 3000 €

#### Rezaei Mehdi

Topic: Advanced Video Signal Processing Methods for Mobile Applications

Grant: 5000 €

#### Riihonen Pekka Taneli Matias

Topic: Edistykselliset välitinkonseptit tulevaisuuden langattomissa viestinjärjestelmissä

Grant: 5000 €

## **Ruokonen Anna Kristiina**

Topic: Model-Driven Development of Web Services Systems

### Saari Ville Olavi

Topic: Analogisten kantataajuusosien toteutus laajakaistaisten radiojärjestelmien integroituihin

vastaanottimiin Grant: 5000 €

#### Saarni Tuomo livari

Topic: Sääntöpohjaisen puhesynteesin kehittäminen

Grant: 5000 €

### **Seuranen Esa Antero**

Topic: Koodien konstruoiminen stokastisilla optimointimenetelmillä

Grant: 5000 €

#### Sievilä Päivi

Topic: Metallisten nanorakenteiden sähköiset ja optiset ominaisuudet

Grant: 5000 €

#### Similä Timo Erkki Edvard

Topic: Advances in input selection and visualization methods for multivariate data analysis

Grant: 5000 €

## **Tuuna Sampo Tapio**

Topic: Kohinan mallinnus ja vähentäminen järjestelmäpiirien kommunikaatiossa

Grant: 5000 €

## Vanhatupa Timo Juhani

Topic: Langattomien paikallisten tiedonsiirtoverkkojen hallinta

Grant: 5000 €

## Vartiainen (Tuula) Johanna

Topic: Langattoman tietoliikenteen häiriönvaimennusta käsittelevä väitöskirjatyö

Grant: 5000 €

## Verkasalo Hannu Tapani

Topic: A Handset-Based Measurement Platform in Mobile Service and Application Research

Grant: 5000 €

#### Vihonen Juho Ville

Topic: Muutoksen ilmaisu vaativissa 2D signaaliolosuhteissa

Grant: 5000 €

## Viikari Ville Valtteri

Topic: Hologrammiin perustuva antennimittauspaikka

Grant: 5000 €

#### Villanen Juha Tapio

Topic: Antennas for Mobile Communication Terminals

Grant: 5000 €

#### Virtanen Kati Pauliina

Topic: Erittäin vähän tehoa kuluttava videonpakkauslaitteisto kannettaville laitteille

## Väyrynen Jaakko Johannes

Topic: Konekääntäminen ja kielellisten rakenteiden oppiminen ohjaamattomasti

Grant: 5000 €

## Westerlund Tomi Vesa Juhani

Topic: AIKA Grant: 5000 €

## **Zou Yaning**

Topic: Advanced DSP Techniques for Mitigation of Analog Front-End Impairments in Future Wireless

Transceivers Grant: 5000 €

# 2005

## **Aikio Janne Petteri**

Topic: RF-tehovahvistimen särön muistin analysointi ja minimointi

Grant: 5000 €

#### **Alanen Marcus**

Topic: Ohjelmistomallintamisen perusteet ja käytäntö

Grant: 5000 €

## Ali-Löytty Simo Sakari

Topic: Luotettavien aikasarja-algoritmien kehittäminen henkilökohtaiseen paikannukseen

Grant: 5000 €

#### **Anttila Lauri Aleksi**

Topic: Kehittyneitä signaalinkäsittelyalgoritmeja vastaanottimen alkupään epäideaalisuuksien

kompensointiin Grant: 5000 €

#### **Belloni Fabio**

Topic: Small Antenna Arrays for Multiantenna Communications

Grant: 5000 €

#### **Codreanu Ionel Marian**

Topic: Multidimensional Adaptive Radio Link for Broadband Communication Systems

Grant: 5000 €

#### Geng Suiyan

Topic: Measurements and modeling of 60 GHz and UWB radio propagation channels for short-range

wireless communications

Grant: 5000 €

## **Ginter Filip**

Topic: Natural language processing of scientific publications

## **Gregorio Fernando Hugo**

Topic: Amplifier Nonlinearities in Multi-Antenna Mobile Communication Systems

Grant: 5000 €

## Haapola Jussi-Pekka

Topic: Medium Access Control Protocols for Wireless Sensor Networks (Langattomien

sensoriverkkojen linkki-ohjausprotokollat)

Grant: 5000 €

### Hankaniemi Mikko Matias

Topic: Teholähteiden karakterisointi ja nopeiden identifiointimenetelmien kehittäminen

Grant: 5000 €

#### Hannuksela Jari

Topic: Visuaalisia seurantatekniikoita kamerapohjaisiin käyttöliittymiin

Grant: 5000 €

#### **Harkke Ville**

Topic: Knowledge Freedoms for Medical Professionals

Grant: 4000 €

## Hollanti Camilla Johanna

Topic: Applications of Crossed Product Algebras in MIMO Space-Time Coding

Grant: 5000 €

#### Häkkilä Jonna Riitta

Topic: Väitöskirja: Towards Usable Context-Aware Mobile Handheld Applications

Grant: 4000 €

## Ikonen Pekka Martti Tapio

Topic: Metamaterials in Antenna and Imaging Applications

Grant: 5000 €

#### Jansson Jussi-Pekka

Topic: Pikosekuntiluokan CMOS-aikavälinmittausteknologia

Grant: 5000 €

#### Järvinen Kimmo Uolevi

Topic: Reconfigurability in hardware acceleration of cryptographic algorithms

Grant: 5000 €

## Karjalainen Päivi Helena

Topic: Puolijohteelle integroidut passiivikomponentit

Grant: 5000 €

#### Kaukovuori Jouni Kristian

Topic: Radiotaajuuspiirien suunnittelu erittäin laajakaistaiseen järjestelmään

Grant: 5000 €

## Kayo (Née Kouropteva) Olga

Topic: Ph.D. thesis titled: Locally Linear Embedding - Extensions and Applications

## Kelloniemi Antti Pekka

Topic: Huoneakustiikan mallintaminen aaltojohtoverkkoa käyttäen

Grant: 5000 €

## Kuorilehto Mauri Tapani

Topic: Palvelun laadun tukeminen langattomissa verkoissa

Grant: 5000 €

### **Lafond Sebastien**

Topic: Energy aware design for embedded systems

Grant: 5000 €

## Lehtimäki Pasi Tapio

Topic: Menetelmiä massiivisten mittausaineistojen hyödyntämiseksi matkapuhelinverkkojen

suorituskyvyn optimoinnissa

Grant: 5000 €

## Loikkanen Mikko Topi

Topic: Compensation and Design of Power Efficient Class AB Amplifiers and LDO regulators

Grant: 5000 €

## Melvasalo Maarit Inka Susanna

Topic: Multiantenna receivers (MIMO) in High Speed Downlink Packet Access (HSDPA) Systems

Grant: 5000 €

## Myllylä Juha Markus

Topic: Rapid prototyping of 4th generation wireless systems and algorithms

Grant: 5000 €

#### Mäntysalo Matti Juhani

Topic: Mikroelektoniikan 3D-rakenteiden sähkömagneettinen mallintaminen

Grant: 5000 €

#### Niemelä Jarno Petteri

Topic: Optimaalinen radioverkon topologia WCDMA-pohjaisiin matkaviestinjärjestelmiin

Grant: 5000 €

## Nieminen (O.S. Antila) Johanna Maria

Topic: Adaptiiviset vuoronjako-algoritmit ja pääsynvalvonta

Grant: 5000 €

## Pahikkala Aarne Tapio

Topic: Koneoppimismenetelmät kieliteknologian apuna

Grant: 5000 €

## Pakarinen Jyri Tapani

Topic: Kielisoittimien mallinnusta ja äänisynteesiä käsittelevä väitöskirjatyö

Grant: 5000 €

## Pertilä Pasi Eerikki

Topic: Äänilähteen paikannus

#### Perttula Antti Osmo Juhani

Topic: New Approaches to Improve Verification and Validation in Fast Cycle Electronics Product

Development. Case Mobile Terminal

Grant: 5000 €

## Pesonen Lauri Ilja Waltter

Topic: A Capabilities-Based Access Control Architecture for Multi-Domain Publish/Subscribe

Systems

Grant: 5000 €

## Pogossova Ekaterina

Topic: Spectral Techniques in Logic Design Signal Processing and Mobile Communications

Grant: 4000 €

## Puska Henri Tapani

Topic: Antenniryhmän käyttö häiriönvaimennuksessa ja koodisynkronoinnin suorituskyvyn

parantamisessa Grant: 5000 €

## Pyysalo Sampo Mikael

Topic: Structured Information Extraction from Scientific Publications: A Knowledge-Rich Machine

Learning Approach Grant: 5000 €

## Pänkäälä Mikko Tapani

Topic: Ultra Low-Power Video Compression System for Mobile Devices

Grant: 5000 €

#### Rabbachin Alberto

Topic: Low complexity and low data rate receivers for UWB systems with location and tracking

capabilities Grant: 5000 €

## Rahtu Esa Mikael

Topic: Invariantit menetelmät hahmontunnistuksessa

Grant: 5000 €

## Raiko Pekka Tapani

Topic: Advances in Bayesian Inference for Learning Classification Reconstruction and Control in

Nonlinear and Structured Settings

Grant: 5000 €

## **Ranvier Sylvain**

Topic: Radio Wave Propagation and Antennas for Very Broadband Mobile Communications

Grant: 5000 €

#### Rauhala Jukka Vesa Tapan

Topic: I Parametric piano synthesis

Grant: 5000 €

#### Rezaei Mehdi

Topic: Advanced Video Signal Processing Methods for Mobile Applications

Grant: 5000 €

#### **Ritari Tuomo Matias**

Topic: Fotonikidekuitujen sovellukset tietoliikennetekniikassa

Grant: 5000 €

#### **Riva Oriana**

Topic: Context-aware services in pervasive computing environments

Grant: 5000 €

### **Roman Timo Eric**

Topic: Advanced Receiver Algorithms for Multicarrier MIMO Communication Systems

Grant: 5000 €

#### Rusu Matei

Topic: Realization of an ultrafast telecom transmitter based on fiber laser and nonlinear optics

Grant: 5000 €

### Saarinen Markku-Juhani Olavi

Topic: Cryptanalysis of Stream Ciphers

Grant: 5000 €

## Saastamoinen Alpo Juhani

Topic: Accuracy of MFCC-based speaker recognition

Grant: 5000 €

#### Salo Jari Pekka

Topic: Statistical Characterization of Fading Radio Channels and Related Functions

Grant: 5000 €

#### Saukoski Mikko Heikki

Topic: Mikromekaanisen gyroskoopin integroitu luku- ja ohjauselektroniikka

Grant: 5000 €

#### Siekkinen Matti Mikael

Topic: Root Cause Analysis of TCP Throughput

Grant: 5000 €

#### Stoica Lucian Vasile

Topic: Ultrawideband Receivers for Low Data Rate Impulse Radio Ultrawideband Systems

Grant: 5000 €

### Susitaival Riikka Pauliina

Topic: Väitöskirjatyö: Adaptiiviset kuormantasausmenetelmät Internetissä

Grant: 5000 €

### Särestöniemi Mariella Marika Johanna

Topic: SC/MMSE-turbokanavakorjain-tekniikoiden suorituskyvyn ja konvergenssin arviointi mitat-tua

kanavadataa käyttäen

Grant: 5000 €

## **Taparugssanagorn Attaphongse**

Topic: 1. Packet Access Networks with Flexible Spectrum Use (PANU) Project work package 5: wide-

band radio channel models

Grant: 5000 €

#### **Toth Geza**

Topic: Finite element analysis design and optimization of micro and nano systems - Carbon

nanotubes the novel material for electronics cooling

Grant: 5000 €

## Trimeche Mejdi

Topic: Nonlinear Methods for Super-Resolution Image Reconstruction

Grant: 5000 €

#### **Turtinen Markus Samuli**

Topic: Paikallisiin binaarikuvioihin perustuva kuvaanalyysi ja tekstuurin karakterisointi

Grant: 5000 €

## **Tuuna Sampo Tapio**

Topic: Kohinan mallinnus ja vähentäminen järjestelmäpiirien kommunikaatiossa

Grant: 5000 €

#### **Ukkonen Anna Leena**

Topic: Passiivisten UHF-taajuuksien RFID-tunnisteantenniratkaisujen kehitys haastaviin kohteisiin ja

ympäristöihin Grant: 5000 €

#### Varonen Mikko Juhani

Topic: Millimetriaaltoalueen radiojärjestelmien piirien integrointi

Grant: 5000 €

## Vartiainen Tuula Johanna

Topic: Langattoman tietoliikenteen häiriönvaimennusta käsittelevä väitöskirjatyö

Grant: 5000 €

## Vasilyeva Ekaterina

Topic: Feedback adaption in web-based systems

Grant: 5000 €

## Villanen Juha Tapio

Topic: Antennas for Mobile Communication Terminals

Grant: 5000 €

## Westerlund Tomi Vesa Juhani

Topic: Aika Grant: 5000 €

#### **Zhong Daidi**

Topic: Compressed Information Processing For Multimedia Retrieval

# 2004

#### **Aaltonen Timo**

Topic: OIVA (Oikeellisuuden validointi horisontaaliarkkitehtuurien avulla)

Host: Tampereen teknillinen yliopisto, Tietotekniikan osasto

Grant: 5000 €

### **Aaltonen Titta Katriina**

Topic: Jalometalliohutkalvojen kasvattaminen atomikerroskasvatus-menetelmällä mikroelektroniikan

sovelluksiin

Host: Helsingin yliopisto, Epäorgaanisen kemian laboratorio

Grant: 5000 €

### **Abdenour Hadid**

Topic: Learning and recognizing faces from image sequences

Host: Electrical and Information Engineering Department, University of Oulu

Grant: 5000 €

## **Abrudan Traian Emanuel**

Topic: Advanced receivers for multicarrier systems in wireless communications

Host: Helsinki University of Technology, Electrical and Communications Engineering Department

Grant: 5000 €

## Aho Eero Tapani

Topic: Konfiguroitava rinnakkaismuisti multimediasovelluksille Host: Tampereen teknillinen yliopisto, Tietotekniikan osasto

Grant: 5000 €

#### **Ahonen Timo Juhani**

Topic: Tekstuurimenetelmien kehitys ja soveltaminen luonnollisten kuvien analysointiin

Host: Oulun yliopisto, sähkö- ja tietotekniikan osasto

Grant: 5000 €

#### **Antila Johanna Maria**

Topic: Adaptiiviset vuoronjakoalgoritmit ja pääsynvalvonta

Host: Teknillinen korkeakoulu, sähkö- ja tietoliikennetekniikan osasto

Grant: 5000 €

#### **Arian Peyman**

Topic: Optimization techniques for designing computationally efficient linear-phase FIR filters

Host: Tampereen teknillinen yliopisto, Signaalinkäsittelyn laitos

Grant: 5000 €

#### Arvo Jukka-Pekka

Topic: Efficient Algorithms for Hardware-Acceleated Shadow Mapping

Host: Turun Yliopisto, Informaatioteknologian laitos

Grant: 4000 €

## **Bilcu Eniko Beatrice**

Topic: Neural Networks for Text-to-Phoneme Mapping

Host: Tampere University of Technology, Institute of Signal Processing

Grant: 5000 €

## Borkowski Maciej Jan

Topic: Delta Sigma Modulation in Radio Frequency Synthesis

Host: University of Oulu, Department of Electrical and Information Engineering

Grant: 5000 €

## **Ginter Filip**

Topic: Natural language processing of scientific publications

Host: Turku Centre for Computer Science (TUCS)

Grant: 5000 €

#### Hakkarainen Väinö Juhani

Topic: Nopeat ja tarkat AD-muuntimet telekommunikaatio sovellutuksiin

Host: Teknillinen korkeakoulu, Sähkö- ja Tietoliikennetekniikka

## Hammouda Imed

Topic: Managing multi-dimensional software systems: tools and applications.

Host: Institute of Software Systems, Tampere University of Technology

Grant: 5000 €

## **Han Shengnan**

Topic: Understanding User Adoption of Mobile Technology: Focus on Finnish Physicians

Host: Åbo Akademi University, Institue for Advanced Management Systems Research (IAMSR)

Grant: 3500 €

## Hannuksela Jari Samuli

Topic: Visuaalisia seurantatekniikoita kamerapohjaisiin käyttöliittymiin

Host: Oulun Yliopisto, Sähkö- ja tietotekniikan osasto

Grant: 5000 €

#### Hansen Henri Juhani

Topic: Tila- ja tapahtumapohjaiset mallit ja determinismi prosessialgebrallisessa verifioinnissa.

Host: Tampereen Teknillinen Yliopisto, Tietotekniikka

Grant: 5000 €

## Harjula Ilkka Simeon

Topic: Channel Estimation and Synchronization in Space-Time Coded OFDM Systems

Host: Oulun Yliopisto, sähkö- ja tietotekniikan osasto

Grant: 5000 €

## Heikkinen Jari Mikko

Topic: Siirtoihin liipaisevan, sulautetuissa järjestelmissä käytettävän prosessoriarkkitehtuurin muistinja tehonkulutuksen optimointi.

Host: Tampereen teknillinen yliopisto, Tietotekniikan osasto

Grant: 5000 €

#### Helovuo Juhana Valtteri

Topic: Funktionaalinen toteutustekniikka signaalinkäsittelyalgoritmeille

Host: Tampereen teknillinen yliopisto, Tietotekniikan osasto

### **Herrero Carlos**

Topic: Data Transmission in Digital Television Networks Host: Helsinki University of Technology, Computer Science

Grant: 5000 €

## Hollanti Camilla Johanna

Topic: Applications of crossed product algebras in MIMO space-time coding

Host: TUCS, Dep. of Mathematics

Grant: 5000 €

### Hämäläinen Perttu Juho

Topic: Tietokonenäköön ja -kuuloon perustuvat opetukselliset käyttöliittymät

Host: Teknillinen korkeakoulu, Tietotekniikan osasto

Grant: 5000 €

#### Härkönen Antti Tuomas

Topic: Surface-normal semiconductor devices for optical clocking Host: Tampereen teknillinen yliopisto, teknis-luonnontieteellinen osasto

Grant: 5000 €

## **Kangas Tero Matias**

Topic: Digitaalisten järjestelmäpiirien alustapohjaiset suunnittelumenetelmät

Host: Tampereen teknillinen yliopisto, Tietotekniikan osasto

Grant: 5000 €

## Kangasvieri Tero Juhani

Topic: RF Performance and Reliability of Highly Integrated Multichip Module Assemblies for Future

Wireless Systems Host: University of Oulu

Grant: 5000 €

#### **Karpov Evgeny**

Topic: Speaker Identification in Mobile Environment

Host: University of Joensuu, department of Computer Science

Grant: 5000 €

#### Kaski Petteri Samuel

Topic: Kombinatorisia algoritmeja luokitteluun ja optimointiin

Host: Teknillinen korkeakoulu, Tietotekniikan osasto

Grant: 5000 €

## Kelloniemi Antti Pekka

Topic: Huoneakustiikan mallintaminen aaltojohtoverkkoa käyttäen Host: Teknillinen korkeakoulu, Sähkö- ja tietoliikennetekniikan osasto

Grant: 4500 €

### Koskinen Tomi Veikko Mikael

Topic: Alimillimetriaaltoalueen hologrammiin perustuva kompakti antennimittauspaikka

Host: Teknillinen korkeakoulu, Sähkö- ja tietoliikennetekniikan osasto

# **Kostov Konstantin Stoychev**

Topic: Dynamic Modelling and Analysis of Distributed Power Supply Systems

Host: Helsinki University of Technology, Department of Electrical and Communications Engineering

Grant: 4000 €

# Kouropteva Olga

Topic: Non-linear Dimensionality Reduction in Visualization and Classification of High-Dimensional

Data

Host: University of Oulu, Department of Electrical and Information

Grant: 5000 €

# **Krendzel Andrey**

Topic: Network Planning Aspects for 3G/4G Mobile Systems

Host: Tampere University of Technology, Department of Information Technology

Grant: 4000 €

# Krogerus Joonas Veli-Allan

Topic: Matkaviestinlaitteiden antennien suorituskyvyn mittausmenetelmien kehittäminen

Host: Teknillinen Korkeakoulu, Sähkö-ja Tietoliikennetekniikan Osasto

Grant: 5000 €

# Lehtimäki Pasi Tapio

Topic: Data-analysis methods for Mobile Network Quality Monitoring, Fault Diagnosis and

Performance Optimization

Host: Teknillinen Korkeakoulu, Tietotekniikan osasto

Grant: 5000 €

# Makkonen Matti Tapani

Topic: Akustiset pinta-aaltosuodattimet langattoman lähiverkon (5 GHz) taajuuksille

Host: Teknillinen korkeakoulu, Teknillisen fysiikan ja matematiikan osasto

Grant: 5000 €

#### Matinlassi Mari Taina Elin

Topic: Laatuohjattu arkkitehtuurimallin transformaatio

Host: Oulun yliopisto, luonnontieteellinen tiedekunta, tietojenkäsittelyopin laitos

Grant: 4000 €

# Melvasalo Maarit Inka Susanna

Topic: Multiantenna receivers (MIMO) in High Speed Downlink Packet Access (HSDPA) Systems

Host: Teknillinen Korkeakoulu, Sähkö- ja tietoliikenne tekniikka

Grant: 5000 €

#### Miao Honglei

Topic: Space-time processing from centralized MIMO sytem to distributed wireless networks:

Channel estimation and signal design

Host: Department of Electrical Engineering, University of Oulu

Grant: 5000 €

#### **Moltchanov Dmitri**

Topic: Packet level performance evaluation of 4G All-IP mobile networks

Host: Tampere University of Technology, Institute of Communications Engineering

## Mäkinen Jari Mikael

Topic: Source adaptation and audio extensions for AMR codec family

Host: Tampereen teknillinen yliopisto, Signaalinkäsittelynlaitos

Grant: 5000 €

# Mäntysalo Matti Juhani

Topic: Mikroelektroniikan 3D-rakenteiden sähkömagneettinen mallintaminen

Host: Tampereen teknillinen yliopisto, Sähkötekniikan osasto

Grant: 5000 €

# **Nurmi Sami Tapani**

Topic: The Reliability of SnAgCu Solder Joints Under Thermo-mechanical Stresses

Host: Tampereen teknillinen yliopisto, Sähkötekniikan osasto

Grant: 5000 €

#### Nurmi Tero Juhani

Topic: Architecture/Technology Exploration of System-on-Chip Modules towards Nanotechnologies

Host: Turun Yliopisto, Informaatioteknologian laitos

Grant: 5000 €

## **Oikarinen Emilia Kristiina**

Topic: Modulaarinen deklaratiivinen sääntöpohjainen rajoiteohjelmointi

Host: Teknillinen korkeakoulu, Tietotekniikan osasto

Grant: 5000 €

## Paavola Jarkko Ilari

Topic: Signal Design for High-Capacity CDMA Networks Host: Turun Yliopisto, Informaatioteknologian laitos

Grant: 5000 €

# Peltomäki Mia Marjukka

Topic: Loogisen päättelyn formaalit menetelmät matematiikan ja tietotekniikan lukio-opetuksessa

Host: Turun yliopisto, Informaatioteknologian laitos

Grant: 5000 €

#### Peltonen Jari Petri Olavi

Topic: Customizable Tool Support for Software Development Processes - a Visual Language Based

Approach

Host: Tampereen teknillinen yliopisto, tietotekniikan osasto, ohjelmistotekniikka

Grant: 5000 €

# Penttilä Katariina Maaria

Topic: RFID lukijan kehittäminen tulevaisuuden automatisoituun tunnistukseen

Host: Tampereen teknillinen yliopisto, Sähkötekniikan osasto

Grant: 5000 €

## Pertilä Pasi Eerikki

Topic: Äänilähteen paikannus

Host: Tampereen teknillinen yliopisto, Tietotekniikan osasto

#### Piatnitsa Vadim

Topic: Investigation and design of miniaturized passive components for Wireless Communication System application based on the novel multilayer technology.

Host: Electrotechnical University of St. Petersburg, Microelectronics Laboratory, Department of

Engineering Grant: 5000 €

#### Pirinen Tuomo Väinö Vilhelm

Topic: Aikaeroon perustuva tulosuunnan arviointi

Host: Tampereen Teknillinen Yliopisto, Tietotekniikan Osasto

Grant: 5000 €

## Pogossova Ekaterina

Topic: Spectral techniques: fast algorithms and applications in signal processing, logic design and

communications

Host: Tampere University of Technology, Department of Information Technology

Grant: 5000 €

# Pohja Mikko Johannes

Topic: Browser Component API

Host: Teknillinen Korkeakoulu, Tietotekniikan osasto

Grant: 5000 €

#### Poikonen Jonne Kalevi

Topic: Analogisten rakenteiden optimointi suuritehoista rinnakkaisprosessoria varten

Host: Turun yliopisto

Grant: 5000 €

## **Puttonen Jani Paavo Johannes**

Topic: Liikkuvuuden hallinta tulevaisuuden langattomissa verkoissa

Host: Jyväskylän yliopisto, Tietotekniikan laitos

Grant: 5000 €

## Pyysalo Sampo Mikael

Topic: Structured Information Extraction from Scientific Publications: A Knowledge-Rich Machine

Learning Approach

Host: Turun yliopisto, Informaatioteknologian laitos, tietojenkäsittelytiede

Grant: 5000 €

#### Rahtu Esa Mikael

Topic: Invariantit menetelmät hahmontunnistuksessa Host: Oulun yliopisto, Sähkö- ja tietotekniikan osasto

Grant: 5000 €

## **Ranvier Sylvain**

Topic: Radio Wave Propagation and Antennas for Very Broadband Mobile Communications

Host: Helsinki University of Technology, Department of electrical and communications engineering

Grant: 4000 €

#### Rautiainen Mika Petteri

Topic: Digitaalisen videon sisältöanalyysimenetelmät videonhallintajärjestelmissä

Host: Oulun yliopisto, Sähkö- ja tietotekniikan osasto

Grant: 5000 €

#### Ribeiro Cassio Barboza

Topic: Stochastic maximum-likelihood MIMO Propagation parameter estimation

Host: Helsinki University of Technology, Signal Processing Laboratory

Grant: 5000 €

# Ristimäki Tapio Veli Juhani

Topic: Väistöskirjatutkimus: Uudelleenkonfiguroitavuus järjestelmäpiireissä

Host: Tampereen teknillinen yliopisto / Tietotekniikan osasto

Grant: 5000 €

# Shahed hagh ghadam Ali

Topic: Advance digital signal processing (DSP) methods for compensating nonidealities in

communications receivers

Host: Tampere University of Technology, Department of Information Technology

Grant: 5000 €

#### Saukoski Mikko Heikki

Topic: Mikromekaanisen gyroskoopin integroitu luku- ja ohjauselektroniikka

Host: Teknillinen korkeakoulu, Sähkö- ja tietoliikennetekniikan osasto

Grant: 5000 €

## Sirola Niilo Torsten

Topic: Algoritmeja satelliitti- ja tukiasemapaikannusdatan yhdistämiseen

Host: Tampereen teknillinen yliopisto

Grant: 5000 €

## Sommarek Johan Valfrid Daniel

Topic: Digital Modulators with On-chip D/A converters

Host: Helsinki University of Technology, Department of Electrical and Communications Engineering

Grant: 5000 €

## **Suliman Isameldin Mohammed**

Topic: Performance Studies of Heterogeneous Wireless Networks: with Resource Allocation Issues

Host: University of Oulu, Telecommunication Laboratory

Grant: 5000 €

## **Tamminen Toni Tapani**

Topic: Bayesilaiset menetelmät tietokonenäössä

Host: Teknillinen korkeakoulu, Sähkö- ja tietoliikennetekniikan osasto

Grant: 5000 €

## Tiitu Mari Hannele

Topic: Local and overall order in self-organized conducting polymers

Host: Teknillinen korkeakoulu, Teknillisen fysiikan ja matematiikan osasto

Grant: 5000 €

#### Toivonen Tuukka Olli Artturi

Topic: Muunnospohjainen liikkeenestimointi

Host: Oulun Yliopisto, Sähkö- ja tietotekniikan osasto

Grant: 5000 €

#### Tölli Antti Heikki

Topic: Radioresurssien hallinta tulevaisuuden langattomissa (4G) matkaviestintäjärjestelmissä

Host: Oulun Yliopisto, Sähkö- ja tietotekniikan osasto

Grant: 5000 €

# Vapa Mikko Antero

Topic: Lisensiaattityön kirjoittaminen aiheena "NeuroSearch: Adaptive Resource Discovery Algorithm

for Peer-to-Peer Networks"

Host: Jyväskylän yliopisto, Tietotekniikan laitos

Grant: 5000 €

#### Vesalainen Laura Ilona

Topic: Datamuunnin- ja sumeanlogiikanlohkojen kehittäminen rinnakkaisprosessorirakenteeseen

Host: Turun yliopisto / IT-laitos / Mikroelektroniikan laboratorio

Grant: 5000 €

#### Vihonen Juho Ville

Topic: Signaalin havaitseminen heikoissa signaali-kohina olosuhteissa (RF-teknisissä sovelluksissa)

Host: Tampereen Teknillinen Yliopisto, Signaalinkäsittelyn laitos

Grant: 5000 €

## Viinikka Jouni Matias

Topic: Analysis tools for security alert management

Host: Université de Caen, Informatique (Tietotekniikka)

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Topic: MIMO radio systems and radiowave propagation

Host: Teknillinen Korkeakoulu

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Topic: Sliding mode control for switch mode power supply

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Topic: Muistijäljen mallintamiseen perustuva DRAM-järjestelmän suunnittelu

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Topic: Nitridikalvojen kasvattaminen ald-menetel-mällä mikroelektroniikan sovelluksiin

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Topic: Mobile augmented reality interface sign interpretation language (marisil)

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Topic: Co-experience - User experience in interaction

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