

2015 International Conference and Workshops on Networked Systems

(NetSys 2015)

**Cottbus, Germany
9-12 March 2015**



**IEEE Catalog Number: CFP15NSD-POD
ISBN: 978-1-4799-5805-4**

TABLE OF CONTENTS

DYNAMIC TRANSMISSION MODES TO SUPPORT OPPORTUNISTIC INFORMATION-CENTRIC NETWORKS	1
<i>Anastasiades, Carlos ; Braun, Torsten</i>	
A COST EFFICIENT SCHEDULING STRATEGY TO GUARANTEE PROBABILISTIC WORKFLOW DEADLINES	6
<i>Bach, Thomas ; Tariq, Muhammad Adnan ; Koldehofe, Boris ; Rothermel, Kurt</i>	
A STUDY OF NETWORKING SOFTWARE INDUCED LATENCY	14
<i>Beifus, Alexander ; Raumer, Daniel ; Emmerich, Paul ; Runge, Torsten M. ; Wohlfart, Florian ; Wolfinger, Bernd E. ; Carle, Georg</i>	
INTERNAL ATTACKS IN ANONYMOUS PUBLISH-SUBSCRIBE P2P OVERLAYS	22
<i>Daubert, Jorg ; Grube, Tim ; Muhlhauser, Max ; Fischer, Mathias</i>	
SMARTERPHONES: ANTICIPATORY DOWNLOAD SCHEDULING FOR WIRELESS VIDEO STREAMING	30
<i>Draxler, Martin ; Blobel, Johannes ; Dreimann, Philipp ; Valentin, Stefan ; Karl, Holger</i>	
RALANS — A RAY LAUNCHING BASED PROPAGATION LOSS MODEL FOR NS-3	38
<i>Hanel, Thomas ; Bothe, Alexander ; Aschenbruck, Nils</i>	
ENABLING RESILIENT SMART GRID COMMUNICATION OVER THE INFORMATION-CENTRIC C-DAX MIDDLEWARE	45
<i>Hoeffling, Michael ; Heimgaertner, Florian ; Menth, Michael ; Katsaros, Konstantinos V. ; Romano, Paolo ; Zanni, Lorenzo ; Kamel, George</i>	
COSCANET-FT: TRANSPARENT NETWORK SUPPORT FOR HIGHLY AVAILABLE CLOUD SERVICES	53
<i>Kachele, Steffen ; Hauck, Franz J.</i>	
TERRORIST FRAUD RESISTANCE OF DISTANCE BOUNDING PROTOCOLS EMPLOYING PHYSICAL UNCLONABLE FUNCTIONS	58
<i>Kleber, Stephan ; van der Heijden, Rens W. ; Kopp, Henning ; Kargl, Frank</i>	
A NOVEL MIDDLEWARE FOR SMART GRID DATA EXCHANGE TOWARDS THE ENERGY EFFICIENCY IN BUILDINGS	66
<i>Martin, Susana ; Hernandez, Jose ; Valmaseda, Cesar</i>	
PARTIAL DELAUNAY TRIANGULATION-BASED ASYNCHRONOUS PLANARIZATION OF QUASI UNIT DISK GRAPHS	74
<i>Neumann, Florentin ; Frey, Hannes</i>	
ORGANIZING AND EVALUATING PUBLISH/SUBSCRIBE SYSTEMS WITH SCOPES	82
<i>Parzyjegla, Helge ; Prellwitz, Matthias ; Muhl, Gero</i>	
OPTIMIZED LOCATION UPDATE PROTOCOLS FOR SECURE AND EFFICIENT POSITION SHARING	90
<i>Riaz, Zohaib ; Durr, Frank ; Rothermel, Kurt</i>	
RETAINING CONTROL OVER SDN NETWORK SERVICES	98
<i>Ropke, Christian ; Holz, Thorsten</i>	
INTEGRATING CHURN INTO THE FORMAL ANALYSIS OF ROUTING ALGORITHMS	103
<i>Roos, Stefanie ; Nguyen, Giang T. ; Strufe, Thorsten</i>	
INFERRING OBFUSCATED VALUES IN FREENET	108
<i>Roos, Stefanie ; Platzer, Florian ; Heller, Jan-Michael ; Strufe, Thorsten</i>	
CCN FORWARDING STRATEGIES FOR MULTIHOMED MOBILE TERMINALS	116
<i>Schneider, Klaus M. ; Mast, Kai ; Krieger, Udo R.</i>	
ACCURATE POLLUTANT MODELING AND MAPPING: APPLYING MACHINE LEARNING TO PARTICIPATORY SENSING AND URBAN TOPOLOGY DATA	121
<i>Schulz, Axel ; Karolus, Jakob ; Janssen, Frederik ; Schweizer, Immanuel</i>	
APP AND PHY IN HARMONY: A FRAMEWORK ENABLING FLEXIBLE PHYSICAL LAYER PROCESSING TO ADDRESS APPLICATION REQUIREMENTS	129
<i>Schulz, Matthias ; Stohr, Denny ; Wilk, Stefan ; Rudolph, Benedikt ; Effelsberg, Wolfgang ; Hollick, Matthias</i>	
A SELF-STABILIZING PUBLISH/SUBSCRIBE MIDDLEWARE FOR WIRELESS SENSOR NETWORKS	137
<i>Siegemund, Gerry ; Turau, Volker ; Maamra, Kahled</i>	
THE POTENTIAL OF SOCIAL-AWARE MULTIMEDIA PREFETCHING ON MOBILE DEVICES	145
<i>Wilk, Stefan ; Ruckert, Julius ; Thram, Timo ; Koch, Christian ; Effelsberg, Wolfgang ; Hausheer, David</i>	

AN ADAPTIVE MIDDLEWARE CORE FOR A MULTI-AGENT COORDINATION LANGUAGE	150
<i>Witsch, Andreas ; Geihs, Kurt</i>	
PRIVACY-FRIENDLY DISTRIBUTED ALGORITHM FOR ENERGY MANAGEMENT IN SMART GRIDS	158
<i>Brettschneider, Daniel ; Scheerhorn, Alfred ; Holker, Daniel ; Roer, Peter ; Tonjes, Ralf</i>	
ENHANCING USER PRIVACY BY DATA DRIVEN SELECTION MECHANISMS FOR FINDING TRANSMISSION-RELEVANT DATA SAMPLES IN ENERGY RECOMMENDER SYSTEMS	166
<i>Englert, Frank ; Rettberg-Paplow, Marius ; Kossler, Sebastian ; Alhamoud, Alaa ; Nguyen, The An Binh ; Bohnstedt, Doreen ; Steinmetz, Ralf</i>	
TRAFFIC ESTIMATION OF THE POWERMATCHER APPLICATION FOR DEMAND SUPPLY MATCHING IN SMART GRIDS	172
<i>Hoefling, Michael ; Heimgaertner, Florian ; Menth, Michael ; Bontius, Herman</i>	
ENABLING COMPLEX BUILDING ENERGY VISUALIZATION BY INTEGRATIVE EVENT-DRIVEN DATA PROVISIONING	178
<i>Kurpatov, Roman ; Schmidt, Mischa ; Schulke, Anett</i>	
AN ENERGY MANAGEMENT SYSTEM FOR A SMART OFFICE ENVIRONMENT	184
<i>Rottondi, Cristina ; Duchon, Markus ; Koss, Dagmar ; Verticale, Giacomo ; Schatz, Bernhard</i>	
A DEMAND RESPONSE APPROACH LOCALLY IMPLEMENTABLE FOR WATERBEDS	190
<i>Venzke, Marcus ; Turau, Volker</i>	
LOAD-DEPENDENT FLOW SPLITTING FOR TRAFFIC ENGINEERING IN RESILIENT OPENFLOW NETWORKS.....	196
<i>Braun, Wolfgang ; Menth, Michael</i>	
PROTOCOL VIRTUALIZATION THROUGH DYNAMIC NETWORK STACKS.....	201
<i>Heuschkel, Jens ; Schweizer, Immanuel ; Zimmermann, Torsten ; Wehrle, Klaus ; Muhlhauser, Max</i>	
INVESTIGATING ISOLATION BETWEEN VIRTUAL NETWORKS IN CASE OF CONGESTION FOR A PRONTO 3290 SWITCH.....	206
<i>Nguyen-Ngoc, Anh ; Lange, Stanislav ; Gebert, Steffen ; Zinner, Thomas ; Tran-Gia, Phuoc ; Jarschel, Michael</i>	
OPEN, ELASTIC PROVISIONING OF HARDWARE ACCELERATION IN NFV ENVIRONMENTS	211
<i>Nobach, Leonhard ; Hausheer, David</i>	
TOWARDS A GPU SDN CONTROLLER	216
<i>Renart, Eduard G. ; Zhang, Eddy Z. ; Nath, Badri</i>	
MD2-NFV: THE CASE FOR MULTI-DOMAIN DISTRIBUTED NETWORK FUNCTIONS VIRTUALIZATION.....	221
<i>Rosa, Raphael Vicente ; Santos, Mateus Augusto Silva ; Rothenberg, Christian Esteve</i>	
COST EFFICIENCY OF SDN IN LTE-BASED MOBILE NETWORKS: CASE FINLAND	226
<i>Zhang, Nan ; Hammainen, Heikki</i>	
Author Index	