Przemysław Pawełczak — Associate Professor

TU Delft — Embedded Systems Group — Sustainable Systems Lab

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Single Page CV

RESEARCH VISION

To make Internet of Things free from batteries, less polluting and sustainable.

TOP FOUR REPRESENTATIVE PUBLICATIONS (LAST THREE YEARS)

1. J. de Winkel, H. Tang, *P. Pawełczak*, Intermittently-Powered Bluetooth that Works, **ACM MobiSys 2022**
2. V. Kortbeek, S. Ghosh, J. Hester, S. Campanoni, *P. Pawełczak*, WARio: Efficient Code Generation for Intermittent Computing, **ACM PLDI 2022**
3. J. de Winkel, V. Kortbeek, J. Hester, *P. Pawełczak*, Battery-Free Game Boy, **ACM IMWUT/UbiComp 2020**
4. V. Kortbeek, K. S. Yıldırım, A. Bakar, J. Sorber, J. Hester, *P. Pawełczak*, Time-sensitive Intermittent Computing Meets Legacy Software, **ACM ASPLOS 2020**

ACADEMIC PERFORMANCE INDICATORS (GOOGLE SCHOLAR)

Citations: 2763 • **H-index:** 27 • **i10-index:** 48

MEDIA COVERAGE OF SELECTED PROJECTS

Battery-Free Game Boy: CNET, The Verge, Hackaday, Mashable, Gizmodo, Engadget, PCMag, The Register, Tech Times, The Independent • **Battery-Free Reprogramming:** SlashDot, FastCompany, The Verge, Quartz

PROFESSIONAL EXPERIENCE (SELECTED)

Associate Professor *TU Delft, NL*, Embedded Systems Group	Mar. 2021–Present
Postdoctoral Researcher *UCLA, USA*, Cognitive Radio Embedded Systems Laboratory	Jul. 2009–Jun. 2011

GRANT ACQUISITION AT TU DELFT (SELECTED)

Flagship Quantum Internet Alliance (EU) [10 M€]	2019–Now
European Training Network in Low-energy Visible Light IoT Systems (EU) [4 M€]	2019–Now
Towards Energy Autonomous Systems for IoT (NWO, NL) [647 k€]	2016–Now
Veni (NWO, NL) [250 k€]	2013–2016

STUDENTS SUPERVISION AT TU DELFT

PhD (current): Carlo Delle Donne, Jasper de Winkel, Vito Kortbeek, James Broadhead • **PhD (passed):** Amjad Yousef Majid (Postdoc, TU Delft), Qingzhi Liu (Lecturer, Wageningen University), Coen van Leeuwen (TNO Scientist) • **Postdoc (mentored):** Yuxiao Hou, Kasım Sinan Yıldırım (Assistant Professor, University of Trento)

TEACHING AT TU DELFT

MSc level: Fundamentals of Wireless Communications [ET4358] (2015–Now), Wireless IoT and Local Area Networks [ET4394] (2014–Now) • **BSc level:** Mentorship [CSE1000] (Academic Coordinator) (2014–Now)

EDUCATION

Doctor of Philosophy *Delft University of Technology, The Netherlands*	Feb. 2005–Apr. 2009
Master of Science *Wrocław University of Science and Technology, Poland*	Sep. 1999–Oct. 2004

PROFESSIONAL SERVICE (SELECTED)

Associate Editor: IEEE Wireless Communications Letters (2018–2021) • **TPC:** IEEE INFOCOM (2016–Now), ACM SenSys 2022, ACM MobiSys 2023, ACM ASPLOS 2023 • **Steering Committee:** ENSsys

Przemysław Pawełczak

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Latest update of this CV: November 14, 2022

RELATED PROFESSIONAL WEBSITES

Google Scholar:	scholar.google.com/citations?user=NzykFrsAAAAJ
Scopus:	scopus.com/authid/detail.url?authorId=14632383700
ORCID:	orcid.org/0000-0002-1302-1148
DBLP	dblp.org/pid/29/1584.html
ArXiv:	https://arxiv.org/search/?searchtype=author&query=Pawe%C5%82czak%2C+P
Twitter:	twitter.com/przemyslawp
LinkedIn:	linkedin.com/in/przemyslawpawelczak

RESEARCH INTERESTS

Internet of Things, Mobile Computing, Energy-Efficient Computing, Battery-Free Systems

EDUCATION

Doctor of Philosophy (Doctor)   Feb. 2005–Apr. 2009
Delft University of Technology, The Netherlands
Department of Electrical Engineering, Mathematics and Computer Science
Advisor: Prof. Ignas G. M. M. Niemegeers
Dissertation: Opportunistic Spectrum Access: Designing Link and Transport Layer

Master of Science (Magister Inżynier)   Sep. 1999–Oct. 2004
Wrocław University of Science and Technology, Poland
Faculty of Electronics
Advisor: Prof. Krzysztof Abramski
Dissertation: Traffic Engineering in All-Optical Networks

RESEARCH AND PROFESSIONAL EXPERIENCE

Associate Professor   Mar. 2021–Present
Delft University of Technology, The Netherlands
Department of Electrical Engineering, Mathematics and Computer Science
Embedded Systems Group

Assistant Professor (Tenured in Dec. 2017)   Jan. 2013–Mar. 2021
Delft University of Technology, The Netherlands
Department of Electrical Engineering, Mathematics and Computer Science
Embedded and Networked Systems Group

Research Fellow   Oct. 2011–Jan. 2013
Fraunhofer Heinrich Hertz Institute, Berlin, Germany
Wireless Communications and Networks Department
Mentor: Prof. Sławomir Stańczak

Postdoctoral Researcher   Jul. 2009–Jun. 2011
University of California, Los Angeles, USA
Department of Electrical Engineering
Cognitive Radio Embedded Systems Laboratory
Mentor: Prof. Danijela Čabrić

Visiting Scholar   Sep. 2007–Jan. 2008
University of California, Berkeley, USA
Department of Electrical Engineering
Connectivity Laboratory (Ceased)
Mentor: Prof. Ahmad Bahai

UMTS Radio Access Engineer   Sep. 2004–Feb. 2005
Nokia Networks (Former Siemens COM)
Research and Development Center, Wrocław, Poland

DISTINCTIONS AND AWARDS

Nomination: UCLA Award for Postdoctoral Research (33/1200 postdocs nominated)	2011
KIVI NIRIA Prize for best PhD Student in Telecommunications in The Netherlands	2009
Visiting Scholar Grant from University of California, Berkeley, USA	2007
Best Graduate Prize, Wrocław University of Technology, Poland	2004
Best MSc thesis award by Society of Polish Electrical Engineers (Runner-up)	2004

GRANT ACQUISITION

Active Grants

Perspectief: Towards Energy Autonomous Systems for IoT (STW) [647 k€] (co-applicant)	2016–Now

Completed Grants

Quantum Internet Alliance (EU) [10 M€] (co-applicant)	2019–2022
European Training Network: Low-Energy Visible Light IoT Systems (EU) [4 M€] (co-applicant)	2019–2021
Community: Self-Sustainable Computing (NIRICT) [10 k€] (co-applicant)	2020–2021
HTSM: Smart Cabin (with Zodiac Aerospace) (TKI) [126 k€] (main applicant)	2018–2019
Veni Grant (NWO) [250 k€] (main applicant)	2013–2016
Reconnaissance: Wirelessly-Powered Autonomous Systems (NIRICT) [10 k€] (co-applicant)	2015

PUBLICATIONS

Peer Reviewed Conference and Workshop Papers

2022

1. Jasper de Winkel, Tom Hoefnagel, Boris Blokland, **Przemysław Pawełczak**, *DIPS: Debug Intermittently-Powered Systems Like Any Embedded System*, Proc. **ACM Conference on Embedded Networked Sensor Systems (ACM SenSys 2022)**, 6–9 Nov. 2022, Boston, MA, USA [See: source code] [Short-listed for best paper award]
2. Abu Bakar, Rishabh Goel, Jasper de Winkel, Jason Huang, Saad Ahmed, Bashima Islam, **Przemysław Pawełczak**, Kasım Sinan Yıldırım, Josiah Hester, *Protean: An Energy-Efficient and Heterogeneous Platform for Adaptive and Hardware-Accelerated Battery-free Computing*, Proc. **ACM Conference on Embedded Networked Sensor Systems (ACM SenSys 2022)**, 6–9 Nov. 2022, Boston, MA, USA [See: project website with source code]

3. Jasper de Winkel, Haozhe Tang, **Przemysław Pawełczak**, *Intermittently-Powered Bluetooth that Works*, Proc. **ACM Conference on Mobile Systems, Applications and Services (ACM MobiSys 2022)**, pp. 287–301, 27 Jun.–1 Jul. 2022, Portland, OR, USA [See: source code]
4. Vito Kortbeek, Souradip Ghosh, Josiah Hester, Simone Campanoni, **Przemysław Pawełczak**, *WARio: Efficient Code Generation for Intermittent Computing*, Proc. **ACM Conference on Programming Language Design and Implementation (ACM PLDI 2022)**, pp. 777–791, 13-17 Jun. 2022, Portland, OR, USA [See: source code, artifacts]

2021

1. James Scott Broadhead, **Przemysław Pawełczak**, *Data Freshness in Mixed-Memory Intermittently-Powered Systems*, Proc. **IEEE International Symposium on Information Theory (IEEE ISIT 2021)**, pp. 3361-3366, 12-20 Jul. 2021 (virtual) [See: source code]
2. Burak Yıldız, Hayley Hung, Jesse H. Krijthe, Cynthia C. S. Liem, Marco Loog, Małgorzata Migut, Frans Oliehoek, Annibale Panichella, **Przemysław Pawełczak**, Stjepan Picek, Mathijs de Weerdt, Jan van Gemert, *ReproducedPapers.org: Openly Teaching and Structuring Machine Learning Reproducibility*, in Proc. **Workshop on Reproducible Research in Pattern Recognition** [IEEE ICPR 2020 Workshop], Jan. 11, 2021 (virtual)
3. Vito Kortbeek, Abu Bakar, Stefany Cruz, Kasım Sinan Yıldırım, **Przemysław Pawełczak**, Josiah Hester, *BFree: Enabling Battery-Free Sensor Prototyping with Python*, Proc. **ACM Interact. Mob. Wearable Ubiquitous Technol. Vol. 4, No. 4, Dec. 2020** and **ACM Ubiquitous Computing Conference (ACM UbiComp 2021)** [See: source code]

2020

1. James Scott Broadhead, **Przemysław Pawełczak**, *Why Intermittent Computing Could Unlock Low-Power Visible Light Communication: Position Paper*, Proc. **Workshop on Light Up the IoT** [ACM MobiCom 2020 Workshop], Sep. 25 2020 (virtual)
2. Jasper de Winkel, Vito Kortbeek, Josiah Hester, **Przemysław Pawełczak**, *Battery-Free Game Boy*, Proc. **ACM Interact. Mob. Wearable Ubiquitous Technol. Vol. 4, No. 3, Sep. 2020** and **ACM Ubiquitous Computing Conference (ACM UbiComp 2020)** [See: source code, ACM UbiComp 2020 presentation, ACM UbiComp 2020 video pitch] [Best Paper Award]
3. Jasper de Winkel, Carlo Delle Donne, Kasım Sinan Yıldırım, **Przemysław Pawełczak**, Josiah Hester, *Reliable Timekeeping for Intermittent Computing*, Proc. **ACM Conference on Architectural Support for Programming Languages and Operating Systems (ACM ASPLOS 2020)** 16–20 Mar. 2020 (virtual) [See: artifacts, source code]
4. Vito Kortbeek, Kasım Sinan Yıldırım, Abu Bakar, Jacob Sorber, Josiah Hester, **Przemysław Pawełczak**, *Time-sensitive Intermittent Computing Meets Legacy Software*, Proc. **ACM Conference on Architectural Support for Programming Languages and Operating Systems (ACM ASPLOS 2020)**, 16–20 Mar. 2020 (virtual) [See: artifacts, source code]

2019

1. Eren Çürük, Kasım Sinan Yıldırım, **Przemysław Pawełczak**, Josiah Hester, *On the Accuracy of Network Synchronization Using Persistent Hourglass Clocks*, Proc. **ACM International Workshop on Energy Harvesting and Energy-Neutral Sensing Systems (ACM ENSsys 2019)** [ACM SenSys 2019 Workshop] pp. 35–41, 10 Nov. 2019, New York, NY, USA
2. Axel Dahlberg, Matthew Skrzypczyk, Tim Coopmans, Leon Wubben, Filip Rozpędek, Matteo Pompili, Arian Stolk, **Przemysław Pawełczak**, Robert Knegjens, Julio de Oliveira Filho, Ronald Hanson, Stephanie Wehner *A Link Layer Protocol for Quantum Networks*, Proc. **ACM Special Interest Group on Data Communication Conference (ACM SIGCOMM 2019)**, pp. 159-173, 19-23 Aug. 2019, Beijing, China
3. Kasım Sinan Yıldırım, **Przemysław Pawełczak**, *On Distributed Sensor Fusion in Batteryless Intermittent Networks*, Proc. **IEEE International Conference on Distributed Computing in Sensor Systems (IEEE DCOSS 2019)**, 29–31 May 2019, Santorini Island, Greece, EU

4. Amjad Yousef Majid, Michel Jansen, Guillermo Ortas Delgado, Kasım Sinan Yıldırım, **Przemysław Pawełczak**, *Multi-hop Backscatter Tag-to-Tag Networks*, Proc. **IEEE Conference on Computer Communications (IEEE INFOCOM 2019)**, 29 Apr.–2 May 2019, Paris, FR, EU [See: ArXiv, source code]

2018

1. Kasım Sinan Yıldırım, Amjad Yousef Majid, Dimitris Patoukas, Koen Schaper, **Przemysław Pawełczak**, Josiah Hester, *InK: Reactive Kernel for Tiny Batteryless Sensors*, Proc. **ACM Conference on Embedded Networked Sensor Systems (ACM SenSys 2018)**, pp. 41–53, 4–7 Nov. 2018, Shenzhen, China [See: source code (runtime), source code (battery-less robot)]
2. Coen van Leeuwen, **Przemysław Pawełczak**, *Hybrid DCOP Solvers: Boosting Performance of Local Search Algorithms*, Proc. **International Workshop on Optimization in Multiagent Systems** [IJCAI-ECAI 2018 Workshop], Jul. 14, Stockholm, Sweden
3. Dimitris Patoukas, Kasım Sinan Yıldırım, Amjad Yousef Majid, Josiah Hester, **Przemysław Pawełczak**, *Feasibility of Multi-Tenancy on Intermittent Power*, Proc. **International Workshop on Energy Harvesting and Energy-Neutral Sensing Systems (ACM ENSsys 2018)** [ACM SenSys 2018 Workshop], pp. 26–31, 4 Nov. 2018, Shenzhen, China
4. Carlo Delle Donne, Kasım Sinan Yıldırım, Amjad Yousef Majid, Josiah Hester, **Przemysław Pawełczak**, *Backing out of Backscatter for Intermittent Wireless Networks*, Proc. **International Workshop on Energy Harvesting and Energy-Neutral Sensing Systems (ACM ENSsys 2018)** [ACM SenSys 2018 Workshop], pp. 38–40, 4 Nov. 2018, Shenzhen, China

2017

1. Coen J. van Leeuwen, Kasım Sinan Yıldırım, **Przemysław Pawełczak**, *Self Adaptive Safe Provisioning of Wireless Power using DCOPs*, in Proc. **IEEE International Conference on Self-Adaptive and Self-Organizing Systems (IEEE SASO 2017)**, 18–22 Sep. 2017, Tucson, AZ, USA [See: source code] [Best Paper Award]
2. Henko Aantjes, Amjad Yousef Majid, **Przemysław Pawełczak**, Jethro Tan, Aaron Parks, Joshua R. Smith *Fast Downstream to Many (Computational) RFIDs*, in Proc. **IEEE Conference on Computer Communications (IEEE INFOCOM 2017)**, 1–4 May 2017, Atlanta, GA, USA
3. Ivar in 't Veen, Amjad Yousef Majid, **Przemysław Pawełczak**, *OTGS: Reducing Energy Consumption of USB-Connected Low-cost Sensors on Smartphones*, in Proc. **IEEE International Symposium on Dynamic Spectrum Access Networks (IEEE DySPAN 2017)**, 6–9 Mar. 2017, Baltimore, MA, USA
4. Coen J. van Leeuwen, **Przemysław Pawełczak**, *CoCoA: A Non-Iterative Approach to a Local Search (A) DCOP Solver*, in Proc. **AAAI Conference on Artificial Intelligence (AAAI 2017)**, 4–10 Feb. 2017, San Francisco, CA, USA [See: source code]

2016

1. Ivar in 't Veen, Qingzhi Liu, **Przemysław Pawełczak**, Aaron Parks, Joshua R. Smith, *BLISP: Enhancing Backscatter radio with Active Radio for Computational RFIDs*, in Proc. **IEEE International Conference on RFID (IEEE RFID 2016)**, 3–5 May 2016, Orlando, FL, USA
2. Jethro Tan, **Przemysław Pawełczak**, Aaron Parks, Joshua R. Smith, *Wisent: Robust Downstream Communication and Storage for Computational RFIDs*, in Proc. **IEEE Conference on Computer Communications (IEEE INFOCOM 2016)**, 10–14 Apr. 2016, San Francisco, GA, USA
3. Kasım Sinan Yıldırım, Henko Aantjes, Amjad Yousef Majid, **Przemysław Pawełczak**, *On the Synchronization of Intermittently Powered Wireless Embedded Systems*, in Proc. **Hillariously Low Power Computing (HLPC 2016)** [ACM ASPLOS 2016 Workshop], 2 Apr. 2016, Atlanta, GA, USA [See: source code]
4. Henko Aantjes, Amjad Yousef Majid, **Przemysław Pawełczak**, *A Testbed for Transiently Powered Computers*, in Proc. **Hillariously Low Power Computing Workshop** [ACM ASPLOS 2016 Workshop], 2 Apr. 2016, Atlanta, GA, USA

2013

1. Pål Grønsund, Paal E. Engelstad, **Przemysław Pawełczak**, Ole Grøndalen, Per H. Lehne, Danijela Čabrić, *Spectrum Sensing Aided Long-Term Spectrum Management in Cognitive Radio Networks*, in Proc. **IEEE Local Computer Networks (IEEE LCN 2013)**, 21–24 Oct. 2013, Sydney, NSW, Australia
2. Pål Grønsund, **Przemysław Pawełczak**, Jihoon Park, Danijela Čabrić, *Sensing of Wireless Microphones in IEEE 802.22: A System Level Performance Evaluation*, in Proc. **IEEE International Conference on Communications (IEEE ICC 2013)**, 9–13 Jun. 2013, Budapest, Hungary, EU
3. Wesam Gabran, **Przemysław Pawełczak**, Chun-Hao Liu, Danijela Čabrić, *Blind Estimation of Primary User Traffic Parameters under Sensing Errors*, in Proc. **IEEE International Conference on Communications (IEEE ICC 2013)**, 9–13 Jun. 2013, Budapest, Hungary

2012

1. Shaunak Joshi, **Przemysław Pawełczak**, John Villasenor, Danijela Čabrić, *Performance of Channel Bonding for Opportunistic Spectrum Access Networks*, in Proc. **IEEE Global Communications Conference (IEEE GLOBECOM 2012)**, 3–7 Dec. 2012, Anaheim, CA, USA
2. **Przemysław Pawełczak**, Meng Zheng, Sławomir Stańczak, Haibin Yu, *Enriching Cellular networks with Dynamic Spectrum Access and Energy Harvesting: a Network Planning Case*, in Proc. **IEEE Symposium on New Frontiers in Dynamic Spectrum Access Networks (IEEE DySPAN 2012)**, 16–19 Oct. 2012, Bellevue, WA, USA

2011

1. Wesam Gabran, **Przemysław Pawełczak**, Danijela Čabrić, *Multi-Channel Multi-Stage Spectrum Sensing: Link Layer Performance and Energy Consumption*, in Proc. **IEEE Symposium on New Frontiers in Dynamic Spectrum Access Networks (IEEE DySPAN 2011)**, 3–6 May 2011, Aachen, Germany, EU

2010

1. Shaunak Joshi, **Przemysław Pawełczak**, Sateesh Addepalli, John Villasenor, Danijela Čabrić *Connection Admission Versus Load Balancing*, in Proc. **IEEE Global Communications Conference (IEEE GLOBECOM 2010)**, 6–10 Dec. 2010, Miami, FL, USA
2. Jihoon Park, **Przemysław Pawełczak**, På Grønsund, Danijela Čabrić, *Performance of Opportunistic Spectrum OFDMA Network with Users of Different Priorities and Traffic Characteristics*, in Proc. **IEEE Global Communications Conference (IEEE GLOBECOM 2010)**, 6–10 Dec. 2010, Miami, FL, USA
3. Jihoon Park, **Przemysław Pawełczak**, Danijela Čabrić, *To Buffer or to Switch: Design of Multichannel MAC for OSA Ad Hoc Networks*, in Proc. **IEEE Symposium on New Frontiers in Dynamic Spectrum Access Networks (IEEE DySPAN 2010)**, 6–9 Apr. 2010, Singapore
4. Rahman Doost Mohhamady, **Przemysław Pawełczak**, Gerard J. M. Janssen, Hans Segers, *Physical Layer Bootstrapping Protocol for Cognitive Radio Networks*, in Proc. **IEEE Consumer Communications and Networking Conference (IEEE CCNC 2010)**, 10–12 Jan. 2010, Las Vegas, NV, USA

2009

1. Cheng Guo, Rangarao Venkatesha Prasad, **Przemysław Pawełczak**, Ramin Hekmat, *Designing Energy Efficient Automatic Repeat Request (ARQ) Protocol in Wireless Sensor Networks*, in Proc. **ACM Workshop on Challenged Networks (ACM CHANTS 2009)** [ACM MobiCom 2009 Workshop], 25 Sep. 2009, Beijing, China
2. Jing Wang, Rangarao Venkatesha Prasad, **Przemysław Pawełczak**, Ignas G. M. M. Niemegeers, *A Link Stability Model for Indoor 60 GHz Radio Wireless Networks*, in Proc. **IEEE Vehicular Technology Conference (IEEE VTC-Fall 2009)**, 20–23 Sep. 2009, Anchorage, AK, USA
3. J. Zhou, C. Guo, **Przemysław Pawełczak**, I. G. M. M. Niemegeers, *Adaptable Link Quality Estimation for Multi Data Rate Communication Networks*, in Proc. **IEEE Vehicular Technology Conference (IEEE VTC-Spring 2009)**, 26–29 Apr. 2009, Barcelona, Spain, EU

4. Nikhil Shetty, Sofie Pollin, **Przemysław Pawełczak**, *Identifying Spectrum Usage by Unknown Systems using Experiments in Machine Learning*, in Proc. **IEEE Wireless Communications and Networking Conference (IEEE WCNC 2009)**, 5–8 Apr. 2009, Budapest, Hungary

5. Cheng Guo, Jinglong Zhou, **Przemysław Pawełczak**, Ramin Hekmat, *Improving Packet Delivery Probability Estimation for Indoor Ad Hoc and Wireless Sensor Networks*, in Proc. **IEEE Consumer Communications and Networking Conference (IEEE CCNC 2009)**, 10–13 Jan. 2009, Las Vegas, NV, USA

2008

1. **Przemysław Pawełczak**, Sofie Pollin, Hoi-Sheung Wilson So, Ahmad Bahai, Rangarao Venkatesha Prasad, Ramin Hekmat, *Comparison of Opportunistic Spectrum Multichannel Medium Access Control Protocols*, in Proc. **IEEE Global Telecommunications Conference (IEEE GLOBECOM 2008)**, 30 Nov.–4 Dec. 2008, New Oreleans, LA, USA

2. **Przemysław Pawełczak**, Sofie Pollin, Hoi-Sheung Wilson So, Ali Motamedi, Ahmad Bahai, Rangarao Venkatesha Prasad, Ramin Hekmat, *State of the Art in Opportunistic Spectrum Access Medium Access Control Design*, in Proc. **ICST/IEEE International Conference on Cognitive Radio Oriented Wireless Networks and Communications (ICST/IEEE CrownCom 2008)**, 15–17 May 2008, Singapore 2008 (*Invited Paper*)

3. Frank E. Visser, Gerard J. M. Janssen, **Przemysław Pawełczak**, *Multinode Spectrum Sensing Based on Energy Detection for Dynamic Spectrum Access*, in Proc. **IEEE Vehicular Technology Conference (IEEE VTC 2008-Spring)**, 11–14 May 2008, Singapore

4. Rangarao Venkatesha Prasad, Vijay S. Rao, H. N. Shankar, **Przemysław Pawełczak**, R. Muralishankar, Ignas G. M. M. Niemegeers, *A Holistic Study of VoIP Session Quality-The Knobs that Control*, in Proc. **IEEE Consumer Communications and Networking Conference (IEEE CCNC 2008)**, 10–12 Jan. 2008, Las Vegas, NV, USA

2007

1. Cheng Guo, Ramin Hekmat, **Przemysław Pawełczak**, *Analysis and Optimization of Energy Efficient Cluster Forming for Wireless Sensor Networks*, in Proc. **IEEE Vehicular Technology Conference (IEEE VTC 2007-Fall)**, 30 Sep.–3 Oct. 2007, Baltimore, MA, USA

2. **Przemysław Pawełczak**, Rangarao Venkatesha Prasad, Ramin Hekmat, *Opportunistic Spectrum Multichannel OFDMA*, in Proc. **IEEE International Conference on Communications (IEEE ICC 2007)**, 24–28 June 2007, Glasgow, Scotland

3. Alex M. R. Slingerland, **Przemysław Pawełczak**, Rangarao Venkatesha Prasad, Anthony Lo, Ramin Hekmat, *Performance of Transport Control Protocol over Dynamic Spectrum Access Links*, in Proc. **IEEE Symposium on New Frontiers in Dynamic Spectrum Access Networks (IEEE DySPAN 2007)**, 17–20 Apr. 2007, Dublin, Ireland

4. Bao Linh Dang, **Przemysław Pawełczak**, Rangarao Venkatesha Prasad, Ignas G. M. M. Niemegeers, *Performance Study of a Novel Architecture for Indoor Networks at 60 GHz Using Extended Cells*, in Proc. **IEEE Consumer Communications and Networking Conference (IEEE CCNC 2007)**, 11–13 Jan. 2007, Las Vegas, NV, USA

2006

1. **Przemysław Pawełczak**, Gerard J. M. Janssen, Rangarao Venkatesha Prasad, *Performance Measures of Dynamic Spectrum Access Networks*, in Proc. **IEEE Global Telecommunications Conference (IEEE GLOBECOM 2006)**, 27 Nov.–1 Dec. 2006, San Francisco, CA, USA

2. Rangarao Venkatesha Prasad, R. Muralishankar, Vijay S., H. N. Shankar, **Przemysław Pawełczak**, Ignas G. M. M. Niemegeers, *Voice Activity Detection for VoIP-An Information Theoretic Approach*, in Proc. **IEEE Global Telecommunications Conference (IEEE GLOBECOM 2006)**, 27 Nov.–1 Dec. 2006, San Francisco, CA, USA

3. Rangarao Venkatesha Prasad, H. N. Shankar, R. S. Varchas, H. S. Jamadagni, **Przemysław Pawełczak**, *User-centric Architecture for Virtual Voice-only VoIP Conferencing*, in Proc. **International Workshop "Towards the QoS Internet" (To-QoS)** [IFIP Networking 2006 Workshop], 19 May 2006, Coimbra, Portugal, EU

2005

1. Rangarao Venkatesha Prasad, H. N. Shankar, **Przemysław Pawełczak**, H.S. Jamadagni, *Fixing Number of Floors for Virtual Voice-Only Conference—an Empirical Study*, in Proc. **IEEE International Symposium on Multimedia (IEEE ISM 2005)**, 12–14 Dec. 2005, Irvine CA, USA
2. **Przemysław Pawełczak**, Rangarao Venkatesha Prasad, Homayoun Nikookar, Igns G. M. M. Niemegeers, *Performance Analysis of Periodical Spectrum Sensing for Dynamic Spectrum Access Networks*, in Proc. **IEEE International Workshop on Adaptive Wireless Networks** [IEEE GLOBECOM 2005 Workshop], 28 Nov. 2005, St. Louis, MO, USA
3. **Przemysław Pawełczak**, Rangarao Venkatesha Prasad, Liang Xia, Ignas G. M. M. Niemegeers, *Cognitive Radio Emergency Networks-Requirements and Design*, in Proc. **IEEE Symposium on New Frontiers on Dynamic Spectrum Access Networks (IEEE DySPAN 2005)**, 8–11 Nov. 2005, Baltimore, MA, USA

Peer Reviewed Journal Papers

Journal Editorial

1. **Przemysław Pawełczak**, Ralf M. Bendlin, Martin B. H. Weiss, *Introduction to the Special Section From the IEEE DySPAN 2017 Conference*, **IEEE Transactions on Cognitive Communications and Networking**, vol. 3, no. 3, pp. 435–436, Sep. 2017

2021

1. Matteo Pompili, Carlo Delle Donne, Ingmar te Raa, Bart van der Vecht, Matthew Skrzypczyk, Guilherme Ferreira, Lisa de Kluijver, Arian J. Stolk, Sophie L.N. Hermans, **Przemysław Pawełczak**, Wojciech Kozlowski, Ronald Hanson, Stephanie Wehner, *Experimental Demonstration of Entanglement Delivery using a Quantum Network Stack*, **npj Quantum Information**, vol. 8, no. 121, Oct. 2022
2. Jasper de Winkel, Vito Kortbeek, Joshah Hester, **Przemysław Pawełczak**, *Battery-Free Game Boy: Sustainable Interactive Devices*, **ACM GetMobile**, vol. 25, no. 2, pp. 22-26, Jun. 2021
3. Qingzhi Liu, Wijger IJntema, Anass Drif, **Przemysław Pawełczak**, Marco Zuniga, Kasım Sinan Yıldırım, *Perpetual Bluetooth Communications for the IoT*, **IEEE Sensors Journal**, vol. 21, no. 1, pp. 829–837, Jan. 2021 [See: ArXiv, source code]

2020

1. Amjad Yousef Majid, Carlo Delle Donne, K. Maeng, A. Colin, Kasım Sinan Yıldırım, Brandon Lucia, **Przemysław Pawełczak**, *Dynamic Task-based Intermittent Execution for Energy-harvesting Devices*, **ACM Transaction on Sensor Networks**, vol. 16, no. 1, pp. 5:1–5:24, Feb. 2020 [See: source code]

2018

1. Kasım Sinan Yıldırım, Henko Aantjes, **Przemysław Pawełczak**, Amjad Yousef Majid, *On the Synchronization of Computational RFIDs*, **IEEE Transactions on Mobile Computing**, vol. 18, no. 9, pp. 2147–2159, Sept. 2019 [See: ArXiv]

2016

1. Qingzhi Liu, Kasım Sinan Yıldırım, **Przemysław Pawełczak**, Martin Warnier, *Safe and Secure Wireless Power Transfer Networks: Challenges and Opportunities in RF-based Systems*, **IEEE Communications Magazine**, vol. 54, no. 9, pp. 74–79, Sep. 2017
2. Qingzhi Liu, Michał Goliński, **Przemysław Pawełczak**, Martin Warnier, *Green Wireless Power Transfer Networks*, **IEEE Journal on Selected Areas in Communications**, vol. 34, no. 5, pp. 1740–1756, May 2016 [See: ArXiv]

2014

1. Chun-Hao Liu, **Przemysław Pawełczak**, Danijela Čabrić, *Primary User Traffic Classification in Dynamic Spectrum Access Networks*, **IEEE Journal on Selected Areas in Communications**, vol. 32, no. 11, pp. 2237–225, Nov. 2014 [See: ArXiv+source code]
2. Pål Grønsund, **Przemysław Pawełczak**, Jihoon Park, Danijela Čabrić, *System Level Performance of IEEE 802.22-2011 with Sensing-Based Detection of Wireless Microphones*, **IEEE Communications Magazine**, vol. 52, no. 1, pp. 200–209, Jan. 2014

2013

1. **Przemysław Pawełczak**, Shaunak Joshi, John Villasenor, Danijela Čabrić, Sateesh Addepalli, *Impact of Connection Admission Process on Load Balancing in Cellular Networks*, **IEEE Transactions on Mobile Computing**, vol. 12, no. 9, pp. 1681–1696, Sep. 2013 [See: ArXiv]
2. Meng Zheng, **Przemysław Pawełczak**, Sławomir Stańczak, H. Yu, *Planning of Cellular Networks Enhanced by Energy Harvesting*, **IEEE Communications Letters**, vol. 17, no. 6, pp. 1092–1095, Jun. 2013 [See: ArXiv+source code]
3. Wesam Gabran, Chun-Hao Liu, **Przemysław Pawełczak**, Danijela Čabrić, *Primary User Traffic Estimation for Dynamic Spectrum Access*, **IEEE Journal on Selected Areas in Communications**, vol. 31, no. 3, pp. 544–558, Mar. 2013 [See: ArXiv]

2012

1. Shaunak Joshi, **Przemysław Pawełczak**, Danijela Čabrić, John Villasenor, *When Channel Bonding is Beneficial for Opportunistic Spectrum Access Networks*, **IEEE Transactions on Wireless Communications**, vol. 11 no. 11, pp. 3942–3956, Nov. 2012 [See: ArXiv]
2. Jihoon Park, **Przemysław Pawełczak**, Pål Grønsund, Danijela Čabrić, *Analysis Framework for Opportunistic Spectrum OFDMA and its Application to IEEE 802.22 Standard*, **IEEE Transactions on Vehicular Technology**, vol. 61, no. 5, pp. 2271–2293, Jun. 2012

2011

1. Wesam Gabran, **Przemysław Pawełczak**, Danijela Čabrić, *Throughput and Collision Analysis of Multi-Channel Multi-Stage Spectrum Sensing Algorithms*, **IEEE Transactions on Vehicular Technology**, vol. 60, no. 7, pp. 3309–3323, Sep. 2011 [See: ArXiv]
2. Jihoon Park, **Przemysław Pawełczak**, Danijela Čabrić, *Performance of Joint Spectrum Sensing and MAC Algorithms for Multichannel Opportunistic Spectrum Access Ad Hoc Networks*, **IEEE Transactions on Mobile Computing**, vol. 10, no. 7, pp. 1011–1027, Jul. 2011 [See: ArXiv]
3. Paulo Urriza, Eric Rebeiz, **Przemysław Pawełczak**, Danijela Čabrić, *Computationally Efficient Modulation Level Classification Based on Probability Distribution Distance Functions*, **IEEE Communications Letters**, vol. 15, no. 5, pp. 476–478, May 2011 [See: ArXiv]
4. **Przemysław Pawełczak**, Keith Nolan, Lynda Doyle, Ser Wah Oh, Danijela Čabrić, *Cognitive Radio: Ten Years of Experimentation and Development*, **IEEE Communications Magazine**, vol. 49, no. 3, pp. 90–100, Mar. 2011

2010

1. Kun Zheng, **Przemysław Pawełczak**, Danijela Čabrić, *Reputation-based Cooperative Spectrum Sensing with Trusted Node Assistance*, **IEEE Communications Letters**, vol. 14, no. 3, pp. 226–228, Mar. 2010
2. Fabrizio Granelli, **Przemysław Pawełczak**, Rangarao Venkatesha Prasad, K. P. Subbalakshmi, Rajarathnam Chandramouli, James A. Hoffmeyer, H. Stephen Berger, *Standardization and Research in Cognitive and Dynamic Spectrum Access Networks: IEEE SCC41 Efforts and Other Activities*, **IEEE Communications Magazine**, vol. 48, no. 1, pp. 71–79, Jan. 2010 [Best Readings on Cognitive Radio distinction by IEEE Communications Society]

2009

1. **Przemysław Pawełczak**, Sofie Pollin, Hoi-Sheung Wilson So, Ahmad Bahai, Rangarao Venkatesha Prasad, R. Hekmat, *Performance Analysis of Multichannel Medium Access Control Algorithms for Opportunistic Spectrum Access*, **IEEE Transactions on Vehicular Technology**, vol. 58, no. 6, pp. 3014–3031, Jul. 2009

2008

1. **Przemysław Pawełczak**, Sofie Pollin, Hoi-Sheung Wilson So, Ahmad Bahai, Rangarao Venkatesha Prasad, Ramin Hekmat, *Quality of Service of Opportunistic Spectrum Access: A Medium Access Control Approach*, **IEEE Wireless Communications**, vol. 15, no. 5, pp. 20–29, Oct. 2008
2. Rangarao Venkatesha Prasad, **Przemysław Pawełczak**, James A. Hoffmeyer and H. Stephen Berger, *Cognitive Functionality in Next Generation Wireless Networks: Standardization Efforts*, **IEEE Communications Magazine**, vol. 46, no. 4, pp. 72–78, Apr. 2008

Book Chapters

1. **Przemysław Pawełczak**, Jihoon Park, Pål Grønsund, Danijela Čabrić, *System Level Analysis of OFDMA-based Networks in TV White Spaces: IEEE 802.22 Case Study*, Book Chapter in **TV White Space for Wireless Broadband: Concepts, Techniques and Applications**, edited by Rashid Abdelhaleem Saeed and Stephen J. Shellhammer, **CRC Press**, 2011
2. **Przemysław Pawełczak**, Rangarao Venkatesha Prasad, *Defining Cognitive Radio*, Invited Book Chapter in **Cognitive Radio Communications and Networks: Principles and Practice**, edited by Alexander Wyglinski, Maziar Nekovee, and Y. Thomas Hou, **Academic Press**, Elsevier Inc., 2010

Standards

1. Jim Hoffmeyer, Denis Stewart, H. Stephen Berger, Bernard C. Eydt, Frederick Frantz, Fabrizio Granelli, Kalle Kontson, David Murotake, Keith Nolan, **Przemysław Pawełczak**, Rangarao Venkatesha Prasad, Richard Roy, Mark Scoville, Douglas Sicker, Darcy Swain, Peter Tenhula, *IEEE Standard Definitions and Concepts for Dynamic Spectrum Access: Terminology Relating to Emerging Wireless Networks, System Functionality, and Spectrum Management*, IEEE 1900.1-2008 Standard, 3 Oct., 2008 [World's second standard related to Dynamic and Opportunistic Spectrum Access]

Tutorials

1. Markus Mueck, Oliver Holland, Mahesh Sooriyabandara, **Przemysław Pawełczak**, *Dynamic Spectrum Access Related Standards*, presented at **IEEE Symposium on New Frontiers on Dynamic Spectrum Access Networks (IEEE DySPAN 2011)** Tutorial Session, 3 May 2011, Aachen, Germany, EU

Demonstrations

1. Shreyas Bhargav Raghunathan, Maarten van den Oever, Rahman Doost-Mohammady, **Przemysław Pawełczak**, Ibrahim Budiarjo, Marnix Heskamp, Qiwei Zhang, André Kokkeler, Homayoun Nikookar, Zhen Qin, Ramin Hekmat, Leonard P. Lighart, *Dynamic Spectrum Access AAF Platform*, presented at **IEEE Symposium on New Frontiers on Dynamic Spectrum Access Networks (IEEE DySPAN 2008)** Demonstration Session, 11–14 Oct. 2008, Chicago, IL, USA

Book Reviews

1. **Przemysław Pawełczak**, *Book Review: Software Defined Radios: From Smart(er) to Cognitive by Sofie Pollin, Michael Timmers, and Liesbet Van der Perre*, **IEEE Communications Magazine**, Vol. 49, no. 8, p. 16, Aug. 2011

2. **Przemysław Pawełczak**, *Book Review: Dynamic Spectrum Access and Management in Cognitive Radio Networks, by Ekram Hossain, Dusit Niyato, and Zhu Han*, **IEEE Communications Magazine**, Vol. 48, no. 2, p. 17, Feb. 2010
3. **Przemysław Pawełczak**, *Book Review: Fundamentals of Resource Allocation in WIreless Networks: Theory and Algorithms, by Sławomir Stańczak, Marcin Wiczanowski and Holger Boche*, **IEEE Communications Magazine**, Vol. 48, no. 2, pp. 16–17, Feb. 2010
4. **Przemysław Pawełczak**, Rangarao Venkatesha Prasad, *Book Review: Cognitive Radio Technology, Bruce A. Fette (editor)*, **IEEE Communications Magazine**, Vol. 46, no. 5, p. 32, May 2008

Patents

2021

1. Jasper de Winkel, Carlo Delle Donne, Kasım Sinan Yıldırım, **Przemysław Pawełczak**, Josiah Hester, *Computing System Comprising a Timekeeping Circuit and Method for Timekeeping*, Dutch Patent Number 2025058, Oct. 14, 2021

2020

1. Kasım Sinan Yıldırım, **Przemysław Pawełczak**, Amjad Yousef Majid, *Power Interrupt Immune Software Execution*, Dutch Patent Number 2021174, Jan. 8, 2020 (expired on Jul. 1, 2021)

2017

1. **Przemysław Pawełczak**, Amjad Yousef Majid, *Method and System for Efficient Access to Spectrum Database*, Dutch Patent Number 2015668, Jun. 16, 2017 (expired on Nov. 1, 2018)
2. **Przemysław Pawełczak**, Ivar In 't Veen, Qingzhi Liu, *Method of Transmitting Data from a Mobile Transmitter Device to a Host Unit, and Mobile Transmitter Device*, Dutch Patent Number 2015432, Mar. 30, 2017 (expired on Oct. 1, 2018)

Technical Reports

2015

1. Qingzhi Liu, Michał Goliński, **Przemysław Pawełczak**, Martijn Warnier *Green Wireless Power Transfer Networks*, TU Delft ES-2015-01 Technical Report, 2015

2014

1. **Przemysław Pawełczak**, Nihan Çiçek, Niels Brouwers, Koen Langendoen *Will Dynamic Spectrum Access Drain My Battery?*, TU Delft ES-2014-01 Technical Report, 2014

Unpublished

2019

1. Amjad Yousef Majid, **Przemysław Pawełczak**, Niels Brouwers, Kasım Sinan Yıldırım, and Koen Langendoen, *Nuna: Where Mobility and Spectrum Databases Meet*, Jun. 2019

SELECTED TALKS

1. *Wireless Reprogramming of CRFIDs*, Carnegie Mellon University, Pittsburg, PA, USA, 5 May 2017
2. *Wireless Reprogramming of CRFIDs* ETHZ, Zurich, Switzerland, 8 Mar. 2016
3. *Wireless Power Transfer Networks: Greenification and Localization*, University of Washington, Seattle, 9 Nov. 2015

4. *Experiments with White Space Databases: Profiling on Mobile Android Smartphone*, EU Workshop on Spectrum Databases, Brussels, 20 Mar. 2015
5. *Experiments with TVWS: Access Delay and Energy Consumption*, ONR Workshon on "Civilian Use of Military Spectrum Bands- Technologies, Impacts and Opportunities", Maynooth, Ireland, 18 Mar. 2015
6. *Experiments with TVWS: Access Delay and Energy Consumption* CR Platform, 12 Jun. 2014
7. *Autarkic Networks*, Holst Center, Eindhoven, 18 Sep. 2013
8. *Will large-scale white space networks work? Experience from IEEE 802.22 evaluation*, Recent advances on Cognitive Radio Technologies in Flanders workshop, IMEC, Leuven, Belgium, 4 Oct. 2011
9. *Multi-Channel Multi-Stage Spectrum Sensing*, Visitor Seminar, University of Southern California, Los Angeles, CA, USA, 8 Jun. 2011
10. *Opportunistic Spectrum Access: Joint MAC and Spectrum Sensing Analysis*, Visitor Seminar, University of California Irvine, Irvine, CA, USA, 5 Apr. 2011
11. *Opportunistic Spectrum Access: A System Level Perspective*, Visitor Seminar, Bell Labs, Antwerpen, Belgium, 20 Jan. 2011
12. *Protocol Design for Opportunistic Spectrum Access*, Visitor Seminar, TU Berlin, Germany, 12 Mar. 2010
13. *Technical Challenges of Cognitive Radio-Related Systems*, Competition and Regulation in Network Industries Conference, Brussels, 28 Nov. 2008
14. *What is Cognitive Radio*, 11th Economics of Infrastructures Conference (Avoiding Harmful Interference and Cognitive Radio Workshop), TU Delft, the Netherlands, 22 May 2008
15. *Cognitive Radio: From Utopia to Reality*, Freeband Ambient Communication Event, Enschede, the Netherlands, 4 Jul. 2006

PROFESSIONAL SERVICE

Associate Editor

IEEE Wireless Communications Letters	2018–2021

Chairing

TPC Co-Chair IEEE DySPAN [Technology Track]	2017
TPC Chair IEEE RFID [Applications and Software Track]	2017, 2018
Demonstration session co-chair and co-organizer IEEE DySPAN	2010, 2011, 2012
IEEE DySPAN Standards Committee [former IEEE SCC41] (Vice-Chair)	2010—2012

Organizing Committee Member

ENSsys Steering Committee Member	2017–Now
HLPC (ACM ASPLOS 2016 Workshop)	2017
IDEA League PhD School on Transietly-Powered Devices	2017
GNU Radio Hackathron at TU Delft	2015
IEEE CogNet (IEEE ICC Workshop)	2007, 2008, 2009
ACM CoRoNet (ACM MobiCom Workshop)	2009, 2010

Technical Program Committee Member (Selected)

ACM MobiSys	2023
ACM ASPLOS	2023
ACM/IEEE IoTDI	2021
ACM SenSys	2020, 2021, 2022
IEEE INFOCOM	2016–Now
ICST CROWNCOM	2016
IEEE CCNC (Short Papers Track)	2009, 2010, 2012, 2016
IEEE ICUWB	2015
ICST Mobilight	2009
IEEE CogNet	2007, 2008, 2009

ACM CoRoNet	2009, 2010
IEEE PIMRC	2009
IEEE ICC (Cognitive Radio and Networks Symposium)	2011, 2012, 2015, 2017, 2018
IEEE ICC (Signal Processing for Communications Symposium)	2012
IEEE GLOBECOM (Cognitive Radio and Networks Symposium)	2011
IEEE WCNC (Service and Application Track)	2011, 2015, 2016
IEEE WCNC (Wireless Communications and Networks Track)	2012
IEEE DySPAN (Technology Track)	2011, 2015, 2017
IEEE PIMRC (Cognitive Radio and Spectrum Management Symposium)	2011
IEEE PIMRC (Services, Applications, and Business Track)	2012

Reviewer

Project Proposals

OTP 2019-6 (NWO) Netherlands	2019
National Science Centre (NSC) Poland	2015
H2020-2016-ITC-03 (European Commission) Europe	2016
Wireless Innovation between Finland and US (Academy of Finland) Finland	2016

Journals (selected)

IEEE Transactions on Communications	2017
ACM/IEEE Transactions on Networking	2014
IEEE Journal on Selected Areas in Communications	2014
IEEE Journal on Selected Topics in Signal Processing	2012
IEEE Communications Magazine	2010, 2016, 2017
IEEE Pervasive Computing	2014, 2018
IEEE Transactions on Mobile Computing	2013, 2014
IEEE Transactions on Vehicular Technology	2013–2015
IEEE Transactions on Wireless Communications	2010–2012, 2015
IEEE Communications Letters	2009–2014, 2017

EXTERNAL EVALUATION COMMITTEES
PhD

1. **KU Leuven** (Alessandro Chuimento)   2015

STUDENTS MENTORING
TU Delft

Active (PhD)

1. **James Broadhead** (PhD): Energy Disaggregation of Lighting Infrastructure in Buildings   2019–Now
2. **Carlo Delle Donne** (PhD): Software Stack for Quantum Internet   2019–Now
3. **Jasper de Winkel** (PhD): Transiently-Powered Networks   2019–Now
4. **Vito Kortbeek** (PhD): Software Frameworks for Intermittently-Powered Systems   2018–Now

Active (MSc)

1. **Christian Peppelman** (MSc)   2022–Now
2. **Giuseppe Di Giuseppe Deininger** (MSc)   2022–Now
3. **Alejandro Cabrerizo Martinez De La Puente** (MSc)   2022–Now

4. **Mark Fijneman** (MSc)   2022–Now
5. **Jeffrey Bouman** (MSc)   2022–Now

Completed Supervision (Postdoc)

1. **Yuxiao Hou** (Postdoc) RFID Missing Tag Identification   2019
2. **Kasım Sinan Yildirim** (Postdoc) Transiently-Powered Systems   2017

Graduated (PhD)

1. **Coen van Leeuwen** (PhD): Distributed Constrained Optimization   2021
2. **Amjad Yousef Majid** (PhD): Software Support for Transiently-Powered Devices   2020
3. **Qingzhi Liu** (PhD): Self-Organizing Energy-Autonomous Systems   2016

Graduated (MSc)

1. **Tom Hoefnagel** (MSc): Debugging Intermittently-Powered Embedded Systems Like Any Other Embedded System   2022
2. **Nathan Prins** (MSc): Optimizing Connection Establishment and Parameter Adaptation in Bluetooth Low Energy for Intermittently-powered Devices   2022
3. **Sourav Mohapatra** (MSc): Efficient Memory Architecture for Next Generation Low-Power Embedded Systems   2022
4. **Felix Hartlieb** (MSc): Software Testing for Intermittent Computing   2022
5. **John Hendriks** (MSc): Robust Bluetooth Low Power Communication   2022
6. **Wouter Kayser** (MSc): NB-IoT: an Operator Perspective - Analysis of Current Usage and Potential Capacity (at VodafoneZiggo)   2021
7. **Philo Tang** (MSc): Ultra-low-power Architecture for Wireless Internet of Things   2021
8. **Jasper de Winkel** (MSc): Keeping Track of Time on Energy Harvesting Systems   2019
9. **Thijmen Ketel** (MSc): Novel Interaction Method for UHF RFID Tags   2019
10. **Vito Kortbeek** (MSc): Dependable Dynamic Checkpoints for Batteryless Devices   2019
11. **Dimitris Patoukas** (MSc): Intermittent Kernel: A First Attempt   2018
12. **Carlo Delle Donne** (MSc): Wake-Up Alignment for Batteryless Sensors   2018
13. **Vincent Koeten** (MSc): Low-Power Machine Learning (at MoMo Medical)   2017
14. **Guillermo Ortas Delgado** (MSc): Phase Cancellation and Range Extension in Backscatter Networks 2018
15. **Ehsan Zabihi** (MSc): Digital Control of RF Energy Harvester (at NOWI Energy)   2017
16. **Koen Schaper** (MSc): Transiently-Powered Robot   2017
17. **Michel Jansen** (MSc): Tag-to-Tag Network   2017
18. **Chiel de Roest** [with Tesla] (MSc): Wireless Code Distribution for Cars   2017
19. **Wieger IJntema** (MSc): Wirelessly-Powered Localization   2016
20. **Felix Fikke** [with BWM] (MSc): Optimization of CAN-Bus in Cars   2016
21. **Henko Aantjes** (MSc): Improving Downstream for CRFID   2016
22. **Simon van der Jagt** [with Industrial Design] (MSc): Wireless Power Transfer   2016
23. **Aryan Masoud** [with Holst Center] (MSc): Hybrid Active/Active Radio   2016
24. **Ivar in 't Veen** (MSc): Hybrid Active/Passive Radio   2015
25. **Michał Goliński** (MSc): Green Wireless Power Transfer Networks   2015
26. **Amjad Yousef Majid** (MSc): White Space Databases   2015
27. **Jethro Tan** (MSc): Downstream for CRFID   2015
28. **Stefan van Breukelen** [with Holst Center] (MSc): Wirelessly-Powered Memory   2014
29. **Liang Huo** [with Holst Center] (MSc): Passive Wake-up for Low Power Radios   2014
30. **Frank E. Visser** (MSc): Cooperative Spectrum Sensing for OSA   2008
31. **Rahman Doost** (MSc): Bootstrapping protocols for OSA   2008

UCLA

Supervision of Graduate Students

1. **Paulo Urriza** (PhD): Energy efficient modulation classification — 2010–2011
2. **Wesam Gabran** (PhD): Multi-stage spectrum sensing protocols — 2009–2011
3. **Shaunak Joshi** (PhD): Load balancing for cellular systems — 2009–2011
4. **Jihoon Park** (PhD): Medium access control design for OSA — 2009–2010

TEACHING

TU Delft

1. **Wireless IoT and Local Area Networks** (ET4394) — 2014–Now
2. **Fundamentals of Wireless Communications** (ET4358) — 2015–Now
3. **Mentorship** (CSE1000) — 2014–Now
4. **Internet of Things** (IN4398) — 2013–2015

UCLA

1. **Special Topics in Circuits and Embedded Systems** (EE209AS) — Summer 2011

PROFESSIONAL AFFILIATIONS

Member: ACM (0735406) — 2020–Now
Member: IEEE Communications Society — 2001–Now
Member: IEEE (1529127) — 2001–Now
Voting Member: IEEE DySPAN Standards Committee [former IEEE SCC41] — 2005–2011
Member: IEEE Standards Association — 2007–2011
Member: IEEE Technical Committee on Cognitive Networks — 2006–2013

LANGUAGES

Polish: Native speaker
English: Fluent
Dutch: NT2 Level II Exam completed (2015)
German: B2 (Goethe Institute Course Completed) (2015)

MISCELLANEOUS

Date and place of birth: 30 December 1980, Tomaszów Lubelski
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