



# SUSTAIN Deliverable

## D8.5 Dissemination of Second Year Project Reports and Publications

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### Action coordinator's scientific representative

Prof. Stephan Sigg  
AALTO –KORKEAKOULUSÄÄTIÖ,  
Aalto University School of Electrical Engineering, Department of Communications and Networking  
stephan.sigg@aalto.fi



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Authors in alphabetical order		
Name	Beneficiary	e-mail
Name (from A's to Z's)	SHORT name of organization	name.name@org.de
Andraud, Martin	AALTO	martin.andraud@aalto.fi
Gasulla, Manel	UPC	manel.gasulla@upc.edu
Heikura, Tuija	AALTO	tuija.heikura@aalto.fi
Iacca, Giovanni	UNITN	giovanni.iacca@unitn.it
Kahraman, Nihan	YTU	nicoskun@yildiz.edu.tr
Ma, Xujun	IMT	xujun.ma@telecom-sudparis.eu
Sigg, Stephan	AALTO	stephan.sigg@aalto.fi
Zhang, Daqing	IMT	daqing.zhang@telecom-sudparis.eu

Abstract
This Deliverable, D8.5 Dissemination of Second Year Project Reports and Publications, lists the project papers and peer-reviewed publications, which have been disseminated via the project webpage.

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## 1 Publications Covering Year 1 and Year 2

Below are Table 1 and Table 2 which contain the publications from Year 1 and Year 2 of the SUSTAIN project.

**Table 1. Publications, Cumulative List Covering Year 1**

Type	Title	Authors	Title of the journal or equivalent & Journal number	Peer-review	Was the publication available in open access ?	PID (Publisher version of record)	PID of deposited publication
Journal article	Applied Soft Computing Journal	Marco Crespi, Andrea Ferigo, Leonardo Lucio Custode, Giovanni Iacca	Applied Soft Computing, Journal no: 147	True	True	10.1016/j.asoc.2023.110758	<a href="https://iris.unitn.it/retrieve/handle/11572/385293/665322/1-s2.0-S1568494623007767-main.pdf">https://iris.unitn.it/retrieve/handle/11572/385293/665322/1-s2.0-S1568494623007767-main.pdf</a>
Journal article	Wi-Diag: Robust Multisubject Abnormal Gait Diagnosis With Commodity Wi-Fi	Lei Zhang, Member, IEEE, Yazhou Ma, Xiaojie Fan, Xiaochen Fan, Member, IEEE, Yonggang Zhang, Member, IEEE, Zhenxiang Chen, Member, IEEE, Xianyi Chen, Member, IEEE, and Daqing Zhang, Fellow, IEEE	IEEE INTERNET OF THINGS JOURNAL	True		10.1109/IJOT.2023.3301908	<a href="https://hal.science/hal-04311972">https://hal.science/hal-04311972</a>
Journal article	Power Gain from Energy Harvesting Sources at High MPPT Sampling Rates	Gasulla Forner, Manuel; Carandell Widmer, Matias	Sensors, Vol 23, Iss 9, p 4388 (2023)	False	False	10.3390/s23094388	10.2139/ssrn.4369585
Conference paper /workshop	Accurate RF-sensing of complex gestures using RFID with variable phase-profiles	Sahar Golipoor, Stephan Sigg	International Symposium on Industrial Electronics - Espoo, Finland	True	True	10.1109/ISIE51358.2023.10228178	<a href="https://urn.fi/URN:BN:fi:aalto-202401171483">https://urn.fi/URN:BN:fi:aalto-202401171483</a>

**Table 2. Publications, Cumulative List Covering Year 2**

Type	Title	Authors	Title of the journal or equivalent & Journal number	Peer-review	Was the publication available in open access ?	PID (Publisher version of record)	PID of deposited publication
Workshop, EWSN 2023 workshop	FedEdge: Federated Learning with Docker and Kubernetes for Scalable and Efficient Edge Computing	Mir Hassan, Leonardo Lucio Custode, Kasim Sinan Yildirim, Giovanni Iacca	EWSN '23: Proceedings of the 2023 International Conference on embedded Wireless Systems and Networks			<a href="#">10.5555/3639940.3639994</a>	
Conference paper	NEvoFed: A Decentralized Approach to Federated NeuroEvolution of Heterogeneous Neural Networks	Leonardo Lucio Custode, Ivanoe De Falco, Antonio Della Cioppa, Giovanni Iacca, Umberto Scafuri	GECCO '24: Proceedings of the Genetic and Evolutionary Computation Conference		Yes	<a href="#">10.1145/3638529.3654029</a>	
Journal Article	Quality–diversity optimization of decision trees for interpretable reinforcement learning	Andrea Ferigo, Leonardo Lucio Custode & Giovanni Iacca	Neural Computing and Applications		Yes	<a href="#">10.1007/s00521-023-09124-5</a>	
Journal Article	A population-based approach for multi-agent interpretable reinforcement learning	Marco Crespi, Andrea Ferigo, Leonardo Lucio Custode, Giovanni Iacca	Applied Soft Computing	True		<a href="#">10.1016/j.asoc.2023.110758</a>	
Conference paper	Memory-efficient Energy-adaptive	Pietro Farina, Subrata Biswas, Eren Yildiz, Khakim Akhunov, Saad	EWSN 2024 Conference				<a href="https://arxiv.org/abs/2405.10426">https://arxiv.org/abs/2405.10426</a>

	Inference of Pre-Trained Models on Batteryless Embedded Systems	Ahmed, Bashima Islam, Kasim Sinan Yildirim					
Workshop	Enabling Efficient Intermittent Computing on Brand New Microcontrollers via Tracking Programmable Voltage Thresholds	Khakim Akhunov, Eren Yildiz, Kasim Sinan Yildirim	EnsSys 2023 Workshop			<a href="#">10.1145/3628353.3628547</a>	979-8-4007-0438-3/23/11
Conference paper	Human Activity Recognition with Ensemble Learning	Hatice Vildan DUDUKCU, Murat TASKIRAN, Zehra Gulru CAM TASKIRAN, Nihan KAHRAMAN	2024 26th International Conference on Digital Signal Processing and its Applications (DSPA)			<a href="#">10.1109/DSPA60853.2024.10510025</a>	
Conference paper	Systematic Experimental Evaluation of Submilliwatt PV Cells for Indoor Applications	E. Ferré, M. Azlor, M. Gasulla, F. Reverter	Eurosenors conference 2023		Yes	<a href="#">10.3390/proceedings2024097149</a>	
Conference paper	FOCV-MPPT Power Management Unit for Submilliwatt Indoor PV Cells	M. Azlor, E. Ferré, M. Gasulla, F. Reverter	Eurosenors conference 2023		Yes	<a href="#">10.3390/proceedings2024097099</a>	
Conference paper	Comparative analysis of low-power PV cells of different technologies under different types of indoor artificial lighting	E. Ferré, M. Gasulla, F. Reverter	IEEE I2MTC 2024			<a href="#">10.1109/I2MTC60896.2024.10561134</a>	

Conrerence paper	RF Energy Harvesting for IoT Sensors: Effects of Inductor Quality Factor on Efficiency	A. Fereshtian, J. Berenguer, and M. Gasulla	IEEE I2MTC 2024			<a href="#">10.1109/I2MTC60896.2024.10560906</a>	
Conrerence paper	Experimental evaluation and comparison of FOCV-based PMU for indoor low-power PV cells	M. Azlor, M. Gasulla, F. Reverter	IEEE I2MTC 2024			<a href="#">10.1109/I2MTC60896.2024.10560660</a>	
Conrerence paper	Test of low-area PV cells under real indoor operating conditions for extended periods of time	M. Villaverde, M. Gasulla, F. Reverter	IEEE SAS 2024			<a href="#">10.1109/SAS60918.2024.10636605</a>	
Conrerence paper	Rectenna with a High Quality-Factor Short-Circuited Transmission Line	A. Fereshtian, J. Berenguer, and M. G. Forner	IEEE SAS 2024			<a href="#">10.1109/SAS60918.2024.10636419</a>	
Conrerence paper	Study of the linearity of low-area photovoltaic cells for indoor autonomous sensors	B. Martinez, M. Ridwan, M. Gasulla and F. Reverter	Eurosenors 2024			<a href="#">10.5162/EUROSENSORSXXXVI/PT10.258</a>	
Conrerence paper	Experimental Evaluation of Thermoelectric Generators for Indoor Autonomous Sensors	M. Ridwan, M. Gasulla, F. Reverter	Eurosenors 2024				10.5162/EUROSENSORSXXXVI/PT10.249
Journal paper	Power Gain from Energy Harvesting Sources at High	M. Gasulla, M. Carandell	Sensors		Yes	<a href="#">10.3390/s23094388</a>	

	MPPT Sampling Rates						
Journal article	From Single-Point to Multi-Point Reflection Modeling: Robust Vital Signs Monitoring via mmWave Sensing	Duo Zhang, Xusheng Zhang, Yaxiong Xie, Fusang Zhang, Hongliu Yang, Daqing Zhang	IEEE Transactions on Mobile Computing	True		<a href="#">10.1109/TMC.2024.3450318</a>	
Conference paper	WiProfile: Unlocking Diffraction Effects for Sub-Centimeter Target Profiling Using Commodity WiFi Devices	Zhiyun Yao, Xuanchi Wang, Kai Niu, Rong Zheng, Junzhe Wang, Daqing Zhang	Proceedings of the 30th Annual International Conference on Mobile Computing and Networking (Mobicom)			<a href="#">10.1145/3636534.3649355</a>	
Conference paper	MSense: Boosting Wireless Sensing Capability Under Motion Interference	Zhaoxin Chang, Fusang Zhang, Jie Xiong, Weiyan Chen, Daqing Zhang	Proceedings of the 30th Annual International Conference on Mobile Computing and Networking (Mobicom)			<a href="#">10.1145/3636534.3649350</a>	
Conference paper	WiFi-CSI Difference Paradigm: Achieving Efficient Doppler Speed Estimation for Passive Tracking	Wenwei Li, Ruiyang Gao, Jie Xiong, Jiarun Zhou, Leye Wang, Xingjian Mao, Enze Yi, Daqing Zhang	Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (Ubicomp)			<a href="#">10.1145/3659608</a>	



Conference paper	Understanding the Diffraction Model in Static Multipath-Rich Environments for WiFi Sensing System Design	Xuanzhi Wang, Anlan Yu, Kai Niu, Weiyan Shi, Junzhe Wang, Zhiyun Yao, Rahul C Shah, Hong Lu, Daqing Zhang	IEEE Transactions on Mobile Computing			<a href="#">10.1109/TMC.2024.3377708</a>	
Conference paper	Enabling WiFi Sensing on New-generation WiFi Cards	Enze Yi, Fusang Zhang, Jie Xiong, Kai Niu, Zhiyun Yao, Daqing Zhang	Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (Ubicomp)			<a href="#">10.1145/3633807</a>	
Conference paper	UniFi: A Unified Framework for Generalizable Gesture Recognition with Wi-Fi Signals Using Consistency-guided Multi-View Networks	Yan Liu, Anlan Yu, Leye Wang, Bin Guo, Yang Li, Enze Yi, Daqing Zhang	Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (Ubicomp)			<a href="#">10.1145/3631429</a>	
Conference paper	BFMSense: WiFi Sensing Using Beamforming Feedback Matrix	Enze Yi, Dan Wu, Jie Xiong, Fusang Zhang, Kai Niu, Wenwei Li, Daqing Zhang	21st USENIX Symposium on Networked Systems Design and Implementation		Yes	<a href="https://www.usenix.org/conference/nsdi24/presentation/yi">https://www.usenix.org/conference/nsdi24/presentation/yi</a>  <a href="#">isbn = {978-1-939133-39-7}</a>	

Journal article	Wicgesture: Meta-motion based continuous gesture recognition with wi-fi	Ruiyang Gao, Wenwei Li, Jinyi Liu, Shuyu Dai, Mi Zhang, Leye Wang, Daqing Zhang	IEEE Internet of Things Journal			<a href="#">10.1109/IJOT.2023.3343875</a>	
Journal article	SlpRoF: Improving the Temporal Coverage and Robustness of RF-based Vital Sign Monitoring during Sleep	Pei Wang, Xujun Ma, Rong Zheng, Luan Chen, Xiaolin Zhang, Djamal Zeghlache, Daqing Zhang	IEEE TRANSACTIONS ON MOBILE COMPUTING			<a href="#">10.1109/TMC.2023.3340925</a>	
Conference paper	WiCross: I Can Know When You Cross Using COTS WiFi Devices	Weiyan Shi, Xuanzhi Wang, Kai Niu, Leye Wang, Daqing Zhang	Adjunct Proceedings of the 2023 ACM International Joint Conference on Pervasive and Ubiquitous Computing & the 2023 ACM International Symposium on Wearable Computing			<a href="#">10.1145/3594739.3610706</a>	

## 2 Appearance of Publications in the SUSTAIN Website

Below is a screen shot of how the publications are shared on the SUSTAIN website.

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