

# Charalampos ORFANIDIS



## PERSONAL DATA

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PLACE AND DATE OF BIRTH: Kavala, Greece | 27 11 1986  
ADDRESS: Belvederekaj 8, 2450 København, Denmark  
PHONE: +45 53550360  
EMAIL: [chaorf@dtu.dk](mailto:chaorf@dtu.dk)  
WEBSITE: <http://www2.compute.dtu.dk/~chaorf/>  
LINKEDIN: <https://www.linkedin.com/in/chaorf>  
SCHOLAR: <https://scholar.google.com/citations?user=uZaCqCIAAAAJ&hl=e>  
ORCID: 0000-0001-6581-314X  
H-INDEX: 6

## RESEARCH INTERESTS

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Low-Power Wide Area Networks, Robust Communications, IoT, Wearables, Energy Harvesting, HCI

## EDUCATION

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SEPTEMBER 2020	PhD in TECHNOLOGY AND HEALTH, <b>KTH, Royal Institute of Technology</b> , Stockholm, Sweden Title: Robust Low-Power Wide Area Networks for Sports and Health
JUNE 2018	Licentiate in COMPUTER SCIENCE WITH SPECIALIZATION IN COMPUTER COMMUNICATION, <b>Uppsala University</b> , Uppsala, Sweden Title: Robustness in Low Power Wide Area Networks
JANUARY 2015	Master of Science in COMPUTER SCIENCE AND ENGINEERING, <b>Technical University of Denmark</b> , Copenhagen, Denmark Thesis: Investigation of Fault Detection Methods in Wireless Sensor Networks
JUNE 2012	Bachelor of Science INDUSTRIAL INFORMATICS ENGINEERING <b>Technological Educational Institute of Kavala</b> , Kavala Thesis: "IIUSA Industrial Informatics University Survey Application"

## POSITIONS

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September 2020 - now :	Postdoctoral Researcher, Technical University of Denmark, DTU Compute
March 2018 - September 2020:	Doctoral Student KTH Royal Institute of Technology, School of Engineering Sciences in Chemistry, Biotechnology and Health
March 2015 - March 2018:	Doctoral Student, Uppsala University, IT department

## TECHNICAL SKILLS

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Programming Languages:	C, C++, Python,
CAD Tools:	Eagle, Upverter
Web Development:	PHP, HTML5
Database Systems:	MySQL, SQL
Operating Systems:	Microsoft Windows, Debian, Contiki OS, RTOS
Simulation:	Cooja, OPNET Modeler
Implementation platforms:	msp430, Cortex-M, ESP32

## SELECTED PUBLICATIONS

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- (2021) C. Orfanidis, M. Jacobsson, X. Fafoutis  
*Human Computer Interaction aspects of Low-Power Wide Area Networks for Wearable Applications*  
1st Workshop on Computer Human Interaction in IoT Applications (CHIIoT), Delft, The Netherlands, 2021
- (2021) C. Orfanidis, R. B. Haj Hassen, A. Kwiek, X. Fafoutis, M. Jacobsson  
*A Discreet Wearable Long-Range Emergency System based on Embedded Machine Learning*  
The 6th IEEE PerCom International workshop on Pervasive Health Technologies (PerHealth), Kassel, Germany, 2021
- (2019) C. Orfanidis, L.M. Feeney, M. Jacobsson and P. Gunningberg  
*Cross-technology Clear Channel Assessment for Low-Power Wide Area Networks*  
16th IEEE International Conference on Mobile Ad-Hoc and Smart Systems (MASS), Monterey, CA, 2019
- (2017) C. Orfanidis, L.M. Feeney, M. Jacobsson and P. Gunningberg  
*Investigating interference between LoRa and IEEE 802.15.4g networks*  
In Proceedings of the 13th International Conference on Wireless and Mobile Computing, Networking and Communications (WiMob), Rome, 2017

## TEACHING

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### Technical University of Denmark

- Foundations of Distributed Systems, Spring 2021
- Network Security, Spring 2021
- Software Development of Web Services, Fall 2014
- Distributed Systems, Spring 2014

### KTH Royal Institute of Technology

- Network Security, Spring 2019, Spring 2020
- Computer Programming, Basic Course, Spring 2019
- Electronic Design, Project Course, Fall 2018

### Uppsala University

- Computer Networks II, Fall 2015, Fall 2016

- Secure Computer Systems I, Fall 2015, Fall 2016
- Software Testing and Maintenance, Fall 2015

## TEACHING COURSES

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[Academic Teacher Training Course](#) - Uppsala University

## STUDENT MENTORSHIP

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- Arwinder Singh (Project course) - *AI hardware accelerator for IoT devices*
- Vedant Hemant Kamlaskar (Project course) - *Battery-free Long Range Smart Shoe*
- Saadman Haq (MSc Thesis) - *Cellular Network Coverage for Smart Agriculture*
- Athanasios Theocharis (MSc Thesis) - *Reliable Mobility in Industrial IoT Networks*
- Rayen Bel Haj Hassen - Armando Kwiek (BSc Thesis) *AI based foot gesture recognition*
- Konstantinos Dimitrakopoulos (MSc Thesis) *Battery-free LPWAN smartshoe*
- Clive Rudd (BSc Thesis) *Energy harvesting for shoe wearables*
- Felix Werpers (Project course) *IoT AI interference recognition*

## SERVICES

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Act as peer reviewer

- Transactions on Emerging Telecommunications Technologies - Wiley
- Annals of Telecommunications - Springer
- Wireless Networks (WINE) - Springer
- Swedish National Computer Networking Workshop SNCNW 2018, 2019, 2020
- IEEE Access
- Ad Hoc Networks - ELSEVIER 2018, 2020
- Journal of King Saud University - Computer and Information Sciences - ELSEVIER
- 8th International Conference on Wireless Communications and Signal Processing (WCSP 2016)
- 2015 IEEE 2nd World Forum on Internet of Things (WF-IoT)

Panelist

- 7th International Workshop on Energy Harvesting & Energy-Neutral Sensing Systems (ENSys), New York, 2019

## INVITED TALKS

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- January 2019, **Enabling IoT for smart cities with LPWAN**, DTU Compute, Technical University of Denmark, organized by [Nordic IoT Hub](#)
- July 2018, **Robustness in Low Power Wide Area Networks**, [Mobile Multimedia Laboratory](#), Athens University of Economics and Business

## RESEARCH VISITS

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- Visiting Scholar (2 months) at [IMT Atlantique](#), Rennes, France, 2019

## LANGUAGES

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GREEK: Native  
ENGLISH: Fluent  
DANISH: Basic Knowledge  
SWEDISH: Basic Knowledge

## CONTACT REFERENCES

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### **Paul Pop**

Professor  
Technical University of Denmark  
[paupo@dtu.dk](mailto:paupo@dtu.dk)  
☎+45 4525 3732

### **Xenofon Fafoutis**

Associate Professor  
Technical University of Denmark  
[xefa@dtu.dk](mailto:xefa@dtu.dk)  
☎+45 45 25 52 78

### **Martin Jacobsson**

Associate Professor  
KTH Royal Institute of Technology  
[martin.jacobsson@sth.kth.se](mailto:martin.jacobsson@sth.kth.se)  
☎+46 8 790 48 33