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Romain Jacob

Postdoctoral Researcher – Open Science Enthusiast

Doctorate in Computer Science	Wireless Embedded Systems
Master in Mechanical Engineering	Automatic Control
Master in Pedagogy	Engineering Sciences

6.8 FTE of research activities*

*Academic age as defined by the SNSF

Education

2015–2019 — Doctorate in Computer Science
"Leveraging Synchronous Transmissions for the Design of Real-time Wireless Cyber-Physical System"
Supervised by Prof. Lothar Thiele
ETH Zurich, Switzerland

2011–2014 — Master in "Engineering of Complex Systems"
Advised by Prof. Jean-Jacques Lesage
École Normale Superieure (ENS) de Cachan, France

2012–2013 — Agrégation in Industrial Science—Mechanics major
French national exam for higher education teachers

Master in "Faculty Training for Higher Education"
École Normale Superieure (ENS) de Cachan, France

2010–2011 — Bachelor in Mechanical Engineering
Université Pierre et Marie Curie (UPMC, Paris 6), France

Experience

2020–current — Postdoctoral Researcher
Networked Systems Group, headed by Prof. Laurent Vanbever
ETH Zurich, Switzerland

2015–2020 — Doctoral Student and Scientific Assistant
Computer Engineering group, headed by Prof. Lothar Thiele
ETH Zurich, Switzerland

2013–2014 — Visiting Scholar
Vehicle Dynamics and Control laboratory, headed by Prof. Karl J. Hedrick†
University of California (UC) Berkeley, CA, USA

2012–2013 — Scientific Consultant
Project with **Aldebaran-Robotics**, creators of Nao the humanoid robot
Paris, France

2012 — Research Intern
Automation research group, supervised by Prof. Martin Fabian
Chalmers University of Technology, Göteborg, Sweden

Distinctions

2022	BenchCouncil Distinguished Doctoral Dissertation Award
2019	Best Paper Award, ACM ICCPS Best Demo Award, ACM/IEEE IPSN Future Prize, second prize, Ewald Marquardt Foundation
2017	Finalist, Famelab Switzerland
2016	Finalist, "My Thesis in 180s" competition organized by Nano-Tera.ch
2014	Ranked 1st at the Agrégation in Industrial Science (national exam)
2013	Research scholarship from the French Academy (Walter-Zellidja Foundation)

Open source projects

Software	TriScale Framework helping to make the experiment design and data analysis more replicable triscale.ethz.ch
Dataset	Synchronous transmissions on Bluetooth 5 and IEEE 802.15.4 Dataset and analysis scripts of a replication study of synchronous transmissions using the nRF52840 Dongle 10.5281/zenodo.3964354 Data visualization: explore-st-data.ethz.ch
Software	Time-Triggered Wireless Architecture Public software and artifacts related to the Time-Triggered Wireless Architecture project 10.5281/zenodo.3759221
Dataset	Wireless Link Quality Estimation on FlockLab – and Beyond Dataset of wireless link quality estimation for the FlockLab testbed 10.5281/zenodo.3354717
Software	Baloo Design framework for network stacks based on Synchronous Transmissions 10.5281/zenodo.3510171
Software	The Distributed Real-time Protocol Simulation code and experiment results for the Distributed Real-time Protocol project 10.5281/zenodo.3530757
Software	The Low-power Wireless Bus Implementation of LWB for the TelosB mote github.com/ETHZ-TEC/LWB-Baseline