

PERSONAL INFORMATION

Full Name:	Carlos Segarra	Languages:		Relevant links:	
Birth year:	1996	Spanish:	Native	Github:	csegarragonz
Residence:	London, UK	English:	Proficient	LinkedIn:	carlossegarrag
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SHORT BIO

I am a fifth-year PhD student at the Large-Scale Data and Systems Group (LSDS) of the Imperial College London, under the supervision of Prof. Peter Pietzuch. My research addresses the design and implementation of secure, high-performance, runtime systems for the cloud. I have a special interest in privacy-preserving systems and confidential computing. As part of my PhD, I have interned with Intel Labs in the datacenter security team and with IBM Research in the hybrid cloud infrastructure team. Before joining Imperial, I received an MSc in advanced mathematics, a BSc in mathematics, and a BSc in electrical engineering from the Technical University of Catalonia (UPC). I have worked as a researcher for the Barcelona Supercomputing Center (BSC), Nokia Bell Labs, the Swiss Center for Electronics and Microtechnology (CSEM), the University of Neuchatel and the UPC.

PUBLICATIONS

<i>Submitted</i>	TLess: Anonymous and Composable Attestation for Confidential Serverless Workflows C. Segarra , S. Shillaker, D. Goltzsche, A. Vahldiek-Oberwagner, M. Steiner, M. Vij, L. Vilanova, R. Kapitza, and P. Pietzuch
NSDI'25	Granny: Granular Management of Compute-Intensive Applications in the Cloud C. Segarra , S. Shillaker, G. Li, E. Mappoura, R. Bruno, L. Vilanova, and P. Pietzuch
SoCC'24	Is It Time To Put Cold Starts In The Deep Freeze? C. Segarra , I. Durev, and P. Pietzuch
SESAME'24 @ EuroSys	Serverless Confidential Containers: Challenges and Opportunities C. Segarra , T. Feldman-Fitzhum, D. Buono, P. Pietzuch
Bitcoin'21	A Novel Framework for the Analysis of Unknown Transactions in Bitcoin: Theory, Model, and Experimental Results M. Caprolu, M. Pontecorvi, M. Signorini, C. Segarra , and R. Di Pietro
EuroSys'20	KOLLAPS: Decentralized and Dynamic Topology Emulator P. Gouveia, J. Neves, C. Segarra , L. Liechti, S. Issa, V. Schiavoni, and M. Matos
SRDS'20	Hardening IoT Brokers Using ARM TrustZone for Secure Pub/Sub Middleware C. Segarra , and R. Delgado-Gonzalo, and V. Schiavoni
MIE'20	MQT-TZ: Secure MQTT Broker for Biomedical Signal Processing on the Edge C. Segarra , and R. Delgado-Gonzalo, and V. Schiavoni
DAIS'19	Using Trusted Execution Environments for Secure Stream Processing of Medical Data C. Segarra , M. Lemay, R. Delgado-Gonzalo, and V. Schiavoni,
EMBC'19	Secure Stream Processing for Medical Data C. Segarra , E. Muntané, M. Lemay, V. Schiavoni, and R. Delgado-Gonzalo

EDUCATION

<i>Current</i> 10/2020	PhD in Computing (Exp. Graduation: 12/2025) Imperial College London - Sup. Professor Peter Pietzuch
07/2020 09/2019	Master in Advanced Mathematics and Mathematical Engineering <i>Technical University of Catalonia, UPC</i>
05/2019 09/2014	Bachelor's degree in Mathematics <i>Technical University of Catalonia, UPC</i>
05/2019 09/2014	Bachelor's degree in Telecommunications Science and Technology <i>Technical University of Catalonia, UPC</i>

WORK EXPERIENCE

11/2023	Graduate Student Visitor at IBM Research (Yorktown Heights, NY, USA)
09/2023	<i>Hybrid Cloud Infrastructure</i> - Sup. Daniele Buono

09/2022	Graduate Research Intern at Intel Labs (Remote)
06/2022	<i>Datacenter Security Group</i> - Sup. Mona Vij
06/2020	Research Collaborator at the Technical University of Catalonia (Barcelona, ES)
10/2019	<i>Computer Architecture Department</i> - Sup. Jordi Guitart, PhD
02/2020	Research Assistant at the Université de Neuchâtel (Neuchâtel, CH)
08/2019	<i>Complex Systems Group</i> - Sup. Valerio Schiavoni, PhD
07/2019	Trainee at the CSEM (Neuchâtel, CH)
10/2018	<i>Embedded Software Division</i> - Sup. Ricard Delgado Gonzalo, PhD
09/2018	Trainee at Nokia Bell Labs (Paris, FR)
06/2018	<i>Security Group</i> - Sup. Matteo Signorini, PhD and Matteo Pontecorvi, PhD
06/2018	Research Student at the Barcelona Supercomputing Center (Barcelona, ES)
04/2017	<i>Workflows and Distributed Computing Group</i> - Sup. Rosa M. Badia, PhD