

# Nicolas Herbaut, M.Eng. M.Ec. PhD.

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## Education

Ph.D. Computer Science (Doctor Europaeus label), Bordeaux University , France 2014-2017.

4 months research visit in Ireland, Performance Engineering Lab, University College of Dublin

Title "Collaborative Content Distribution Over a VNF-as-a-Service Platform"

Advisor: Daniel Négru

Reviewers: Laurent MATHY, Tarik TALEB

Jury: Francine KRIEF, Liam MURPHY, Adlen KSENTINI, Marko VUKOLIC

M.Econ Economical Analysis and Econometrics, Aix-Marseille University, France 2005

M.Eng Mathematical Engineering, National Institute of Applied Science of Rouen, France, 2004

2 semesters Erasmus exchange in Italy, Università degli Studi di Ferrara

## Employment

### *Academia*

Associate Professor at Université Paris 1 Panthéon Sorbonne, 2018-

Postdoc at CNRS LIG/Grenoble, ERODS Team, 2017-2018

TA at Bordeaux-INP ENSEIB-MATMECA Engineering School, Telecom Department, 2014-2017

TA at Epitech Marseille Engineering School, 2014

Research Fellow at Bordeaux University, European FP7 Projet T-NOVA, 2014-2017

### *Industry*

R&D Team Manager, Progexia, Marseille France, 2013-2014

R&D Team Leader, Itellinium, Marseille France, 2012-2013

R&D Team Leader, Royal Cactus, Marseille France, 2011-2012

R&D Engineer, Mail In Black, Marseille France, 2010-2011

R&D Team Manager, Dmailer, Marseille France, 2007-2010

R&D Engineer, Amadeus Global Code (contractor), Sophia Antipolis, 2006-2007

R&D Engineer, Thales Alenia Space (contractor), Sophia Antipolis, 2005-2006

## Publications

### Journal Articles

1. Nicolas Herbaut and D. Négru, "A Model For Collaborative Blockchain-based Video Delivery Relying On Advanced Network Services Chains," *IEEE Communication Magazine*, vol. 55, issue 9, to be published in 09/2017.
2. Nicolas Herbaut and D. Négru, D. Dietrich, and P. Papadimitriou, "Dynamic deployment and optimization of virtual content delivery networks," *IEEE Multimedia*, vol. 24, issue 3 to be published in 07/2017.
3. Y. Rebahi, M. S. Ghamsi, Nicolas Herbaut, D. Négru, P. M. Comi, P. S. Crosta, P. Lorenz, E. Pallis, and E. Markakis, "Virtual network functions deployment between business expectations and technical challenges: The t-nova approach," *Recent Advances in Communications and Networking Technology*, vol. 5, 10/2016.
4. Nicolas Herbaut, G. Xilouris, and D. Négru, "The surrogate vnf approach for content distribution," *COMSOC Multimedia Communications Technical Committee E-Letter*, vol. 10, p. 4-6, 2015.

### Proceedings

1. Nicolas Herbaut, Daniel Negru, David Dietrich, and Panagiotis Papadimitriou. "Service Chain Modeling and Embedding for NFV-based Content Delivery." In IEEE International Conference on Communications (ICC). 2017.
2. Nicolas Herbaut, Daniel Negru, Yiping Chen, Pantelis A. Frangoudis, and Adlen Ksentini. "Content delivery networks as a virtual network function: a win-win isp-cdn collaboration." In Global Communications Conference (GLOBECOM), IEEE, pp. 1-6. IEEE, 2016.
3. Nicolas Herbaut, Daniel Negru, Damien Magoni, and Pantelis A. Frangoudis. "Deploying a content delivery service function chain on an SDN-NFV operator infrastructure." In Telecommunications and Multimedia (TEMU), International Conference on, pp. 1-7. IEEE, 2016.
4. Nicolas Herbaut, Daniel Negru, George Xilouris, and Yiping Chen. "Migrating to a nfv-based home gateway: introducing a surrogate vnf approach." In Network of the Future (NOF), 6th International Conference on the, pp. 1-7. IEEE, 2015.

## Courses Taught

### At Université Paris 1

Fall 2019	M1 MIAGE Frameworks and Components	Prof 90h
Fall 2019	L2 MIASH Java Object Programming Introduction	Prof 45h
Fall 2019	L3 MIAGE Java Object Programming Advanced	Prof 75h
Fall 2019	L2 MIASH Web Development Introduction	Prof 45h
Fall 2019	L3 MIAGE DevOPS and Programming workshop	Prof 32h
Spring 2019	M2 MIAGE Research Workshop	Prof 32h
Spring 2019	L3 MIAGE DevOPS and Programming workshop	Prof 32h
Fall 2018	L2 MIASH Java Object Programming Introduction	Prof 45h
Fall 2018	L3 MIAGE Java Object Programming Advanced	Prof 75h
Fall 2018	L2 MIASH Web Development Introduction	Prof 45h

### *At Grenoble University*

Spring 2018 GBMI6U30 L3 - Object Programming TA 18h

### *At ENSEIRB-MATMECA*

Fall 2017	RE355 M2 - Introduction to Cloud Programming	Lecturer 4h
Spring 2017	RE213 M1- Distributed applications and webservice	Lecturer 16h
Fall 2016	RE216 M1- Network Programming	TA 25h
Fall 2016	RE355 M2- Introduction to Cloud Programming	Lecturer 4h, TA 16h
Spring 2016	RE213 M1- Distributed applications and webservice	Lecturer 16h
Spring 2016	RE350 M2- Multimedia Gateways	TA 16h
Fall 2015	RE216 M1- Network Programming	TA 25h
Spring 2015	RE350 M2- Multimedia Gateways	TA 16h
Spring 2015	RE213 M1- Distributed applications and webservice	Lecturer 16h
Fall 2014	RE216 M1- Network Programming	TA 25h

### *At Epitech*

Spring 2014 JEE101 L3- Introduction to Enterprise Java Lecturer + TA 30h

### *At JDEV/CNRS*

Summer 2015 Virtualizing your applications with Docker Lecturer + TA 8h

## Mentorship and Advising

*Mohamed Tebib, PhD co-direction w/ Pr. Camile Salinesi at Paris 1 Panthéon-Sorbonne, 2019*

Gamifying Requirement engineering.

*Medi@Home, Graduate 6 month team project at ENSEIRB 2014*

the Private Home-Media Social Network  
6 Master students from the Telecom department.

*SnapMail Project, Graduate 5 month team project at ENSEIRB, 2015*

Private Cloud gateway for Email Sharing  
7 Master students from the Telecom department.

*Docker in the Cloud, Graduate 6 month team project at ENSEIRB, 2016*

Study of Orchestration solution for containers (swarm, coreos, k8s)  
8 Master students from the Telecom department.

### *In the industry*

I was responsible of teams of 3-7 people. I was in charge of their recruitment, motivation, technical training, HR questions.

## Service

### *Administrative*

I'm in charge of industrial relationships for the Business Informatics department of Paris 1 University. Since 2011, I spend a week per year at the local Marseille Selection Board for INSA Lyon (a leading Engineering School in France). Paired with a Psychologist and an INSA Professor, we conjointly run interviews of candidates.

### *Volunteering*

- 2019- Société Informatique de France (CS learned society in France), Secretary
- 2018 IFIP Network Traffic Measurement and Analysis Conference Shadow PC Member
- 2018 Eurosys Heavy Shadow PC Member
- 2017 IEEE ICC Conference Student Volunteer
- 2016-2018 Les Petits Débrouillards Associations, Administrator
- 2015-2017 CS Grad students Society of Bordeaux, Secretary
- 2015-2017 Math & Computer Science Graduate School of Bordeaux, Student Representative
- 2015 ACM Eurosys Conference Student Volunteer
- 2010-2014 Sel de MARS Timebank Association, co-founder and administrator

## Professional Skills

<b>Development</b>	
OS	GNU/Linux (devOps), MacOSX, Windows...
Databases	MySQL, MS SQL Server, SQLite, MongoDB
Languages	Python, JAVA, C, C++, Go, R...
Web	HTML/CSS, JQuery, Angular JS...
Frameworks	Spring, Spring Boot, JEE, Struts, Portlets, Junit...
Development Methodology	OMT - UML, eXtrem Programming, Scrum
Tooling	Maven, Docker, SaltStack,...
<b>Projet engineering</b>	
Project Management	10+ projects, sub-contracting, remote management, collaborative projects
Team management	small and medium teams, HR, job interviews
<b>Languages</b>	
French	Mother tongue
English	Proficient (4 months visiting researcher in Dublin, Ireland)
Italian	Proficient (1 year graduate studies in Italy)