

Andreas Guillot

PhD student in Computer Science

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Address

ICube — Pôle API
Bd Sebastien Brant
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Web

[Website](#)
[GitHub](#)

Expertise

Security

Firewall, Cryptography,
Certificates, VPN, SGX

Model checking

System spec w/ Kripke,
formal spec w/ LTL, verif

Cloud infrastructure

Docker, Kubernetes,
microservices, service
mesh

Statistics

Time series analysis,
classification

Routing

OSPF, IS-IS, RIP,
BGP, MPLS

Network Management

Cisco, Juniper, IPv6

Programming

Python, C, Java, SQL

Miscellaneous

Database Management,
GNU/Linux, QoS, \LaTeX ,
Version Control,
blockchain, smart
contract

Languages

French

Mother Tongue

English

Fluent (C2)

Russian

студент

Research

- 2018- **PhD student** [Network Research Group, ICube, Strasbourg](#)
Subject: Development of a secured workflow
Keywords: Security, privacy, distributed systems, workflow management.
Supervisors: [Cristel Pelsser](#), [Fabrice Théoleyre](#).
- 2018/01–07 **Research assistant** [Network Research Group, ICube, Strasbourg - Report](#)
2018/06–07 **Visiting researcher** [IIJ-II, Tokyo](#)
Subject: Internet Background Radiation and Outage Detection
Keywords: Data science, time series analysis, classification, predictive models.
Supervisors: [Cristel Pelsser](#), [Pascal Mérindol](#), [Romain Fontugne](#).
- 2017/01–08 **Research assistant** [Network Research Group, ICube, Strasbourg - Report](#)
Subject: Towards a hybrid approach for monitoring IP networks
Keywords: Network measurements, network monitoring, data correlation.
Supervisor: [Pascal Mérindol](#).
- 2016/05–06 **Internship in a research team** [Network Research Group, ICube, Strasbourg](#)
Subject: Inferring data plane from control plane messages
Keywords: Measurement platform, multi-paths, ISP network analysis.
Supervisor: [Pascal Mérindol](#).

Peer-reviewed publications

- [TMA19] Andreas GUILLOT, Romain FONTUGNE, Philipp WINTER, Pascal MERINDOL, Alistair KING, Alberto DAINOTTI, and Cristel PELSSER
Chocolatine: Outage Detection for Internet Background Radiation
To appear in Network Traffic Measurement and Analysis (TMA) conference
- [MUF20] Andreas GUILLOT, Fabrice THEOLEYRE, and Cristel PELSSER
Muffliato: Deploying Secured and Leak-Aware Workflows in the Cloud
Submitted to journal Computer Networks in 2020 (Impact Factor: 3.030)

Invited talks

- [IMAPS18] Andreas GUILLOT
Detecting outages using unsolicited traffic and SARIMA
Internet Measurement and Political Science (IMAPS) workshop 2018 — UCSD, San Diego, USA

Education

- 2016–2018 **Master's degree in Computer Science** [University of Strasbourg](#)
'Computer Networks and Embedded Systems':
Networking Protocols, Inter-Domain Routing, Performance Evaluation, Distributed Algorithms, Compilation, Security, Embedded Systems
Ranking — 1/25
- 2013–2016 **Bachelor in Computer Science** [University of Strasbourg](#)
2015/01–07 **ERASMUS semester** [VIA University College, Horsens \(Denmark\)](#)
Graph Theory, Database Management, Intra-Domain Routing and L2/L3 forwarding, Language Theory, Data Structures and Algorithms
- 2011–2013 **(First two years of) Bachelor in Biology** [University of Strasbourg](#)
Genetics, Biodiversity, Immunology, Scientific Reasoning

Teaching (CM=lecture, TD/CI=lecture and exercises, TP=practical)

Name (2019-2020)	ECTS	Type	Hours	Responsibilities	Description
Bachelor in Computer Science: <u>Réseaux locaux</u> (Local networks)	3	CM TD TP	7 8 16	- Made and corrected exams - Created class material	Media Access Control, STP, VLAN, Error-correcting codes (Hamming + CRC)
Bachelor in Computer Science: <u>Réseaux IP</u> (IP networks)	3	TP	8	-	Study and deployment of: Ethernet, IPv4, IPv6, neighbor discovery, auto-configuration
Name (2018-2019)	ECTS	Type	Hours	Responsibilities	Description
Masters in Geography: <u>Introduction à la programmation</u> (Introduction to programming)	3	CI	30	- In charge of entire class - Made and corrected exams - Created class material	Python language, variables, conditions, loops, functions, basic structures
Masters in Computer Science: <u>Travail d'étude et de recherche</u> (Introduction to research)	6	Tutor	-	- Supervised student - Corrected report - Graded presentations	Reading scientific papers, writing a state-of-the-art, presenting research results (Student report)
Bachelor in Computer Science: <u>Structures de données et algorithmique</u> (Data structures and algorithms)	6	TP	12	- Made and corrected exams	C programming of data structures (lists, queue, stack, iterator)
Bachelor in Computer Science: <u>Réseaux et protocoles</u> (Networks and protocols)	3	TP	12	-	Intro to network administration on Juniper and CISCO: IPv4, IPv6, OSPF, VLAN

Additional activities

Scientific reviews

- [Passive and Active Measurements 2019](#)
- [Wired/Wireless Internet Communications 2019](#)
- [ACM Internet Measurement Conference \(IMC\) 2019](#)
- [Algotel 2019](#)
- [Computer Communications \(in 2018\)](#)

Organization

- **Student volunteer** at [IEEE INFOCOM 2019](#)
- **Member of the administrative council** of the association for young researchers of the ICube lab

References

- Fabrice Theoleyre **CNRS, France**
theoleyre@unistra.fr – PhD Co-Supervisor
- Pascal Mérindol **ICube Laboratory, University of Strasbourg, France**
merindol@unistra.fr – Internship supervisor
- Romain Fontugne **Internet Initiative Japan Innovation Institute (IIJ-II), Tokyo, Japan**
romain@ij.ad.jp – Internship Supervisor