

Lionel NICOLAS

General Information

- **Date and place of birth** April 17th 1983 in Nice, France
- **Residence** Trento, Italy
- **Nationality** French
- **Civil status** Married
- **Professional status** Senior researcher in Computational Linguistics / Natural Language Processing
EURAC, European Academy of Bolzano, Italy

Research Interests

The efficiency and linguistic relevance of most *NLP/CL* tools depend directly or indirectly on the quality and coverage of the numeric linguistic resources they rely on. Even for major languages such as Spanish and French, many well known and widely used linguistic resources are still in a precarious state of development. For languages with smaller speech communities, they often barely exist.

Such situation is a direct consequence of the ambiguity and irregularities of natural languages making their formalization complex, their manual description labor-intensive and their automatic acquisition difficult.

Nowadays, for linguistic aspects that have consensual frameworks to describe them, one can consider the efforts required to develop linguistic resources as the main limitation. As formalized by Zipf's law, increasing the quality and coverage becomes increasingly difficult with time since the efforts required are always more demanding when compared with the resulting improvements.

In other words, the difficulty for some linguistic levels lies less in how to describe them than in actually achieving a description that has both the coverage and precision required by complex NLP tasks. Owing to these issues, building linguistic resources can take years of constant efforts which can fail to achieve visible or useful results. Therefore, their creation and extension is an open question of considerable interest for the NLP community.

In this context, my research focuses on enhancing the production of symbolic linguistic resources. More specifically, my research objectives focus (among other things) on practical guidelines for saving efforts when creating or improving linguistic resources, on the automatized transfer of linguistic knowledge between two closely related languages, on the automatized creation and extension of linguistic resources and on the combination of language learning and crowdsourcing for the purpose of creating linguistic resources. Recently, my efforts regarding the combination of language learning and crowdsourcing allowed to fund and start a large European network project aiming at creating a new R&I community involving numerous NLP and other language-related stakeholders.

During my career, I also have been involved in the development of methods and tools related to learner corpora, web corpus, digital infrastructures and linguistic data visualization. Even though my profile is at first the one of a academic researcher, I've also had the occasion to work in the industrial sector for a short span of time, to teach for some years during my PhD and to take part in the elaboration of a substantial number of project proposals.

Professional experience

- **Senior researcher in Computational Linguistics / Natural Language Processing**
Since January 2012
EURAC, European Academy of Bolzano, Italy
- **Researcher in Computational Linguistics / Natural Language Processing**
+ Assistant teacher in Computer Science
September 2011 / December 2011
University of Nice Sophia Antipolis, campus Valrose, France
- **Head researcher in Computational linguistics / Natural Language Processing**
February 2011 / July 2011
Molino de Ideas S.A, Madrid, Spain
- **PhD Student in Computational Linguistics / Natural Language Processing**
+ Assistant teacher in Computer Science
September 2006 / December 2010
University of Nice Sophia Antipolis, campus Valrose, France
- **Personal tutor of English, Spanish, Maths and computer Science**
September 2002 / June 2006
Scolamania, Nice, France

Academic Background

- **PhD in Computational linguistics / Natural Language Processing,**
"Efficient production of linguistic resources: the Victoria Project",
RL team, I3S laboratory, University of Nice Sophia-Antipolis,
October 2006 / December 2010.

Grants and contracts	Assistant teacher, Ministerial research contract, Mobility grant,	University of Nice Sophia-Antipolis. French Ministry for Research. General Council of Alpes Maritimes.
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- **Master Degree in Computer Science Research,**
University of Nice Sophia-Antipolis,
October 2003 / July 2006.

Grants	5 th year Merit Grant, Erasmus Grant,	University of Nice Sophia Antipolis. General Council of Alpes Maritimes. ETSI2 of Granada (Spain).
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- **Bachelor Degree in Computer Science,**
University of Nice Sophia-Antipolis,
October 2000 / July 2003.

2018

- **Transc&Anno: A graphical tool for the transcription and On-the-Fly annotation,** (Int)
Nadezda Okinina, **Lionel Nicolas** and Verena Lyding,
Proceedings of **LREC 2018**, Miyazaki, Japan.
- **CLARIN-IT: State of Affairs, Challenges and Opportunities,** (Int)
Lionel Nicolas, Alexander Konig, Monica Monachini, Riccardo Del Gratta, Silvia Calamaic & al.,
Proceedings of **CAC 2017**, Budapest, Hungary.

2016

- **An extended version of the KoKo German L1 Learner corpus,** (Nat)
Andrea Abel, Aivars Glaznieks, Verena Lyding and **Lionel Nicolas** and Egon Stemle,
Proceedings of **CLIC-it 2016**, Naples, Italy.

2015

- **Correcting OCR errors for German in Fraktur font,** (Nat)
Michel Génèreux, Egon Stemle, Verena Lyding and **Lionel Nicolas**,
Proceedings of **CLIC-it 2014**, Pisa, Italy.
- **A Generic Data Workflow for Building Annotated Text Corpora,** (Int)
Lionel Nicolas, Egon Stemle, Aivars Glaznieks & Andrea Abel,
Studies in Learner Corpus Linguistics (eds). Frankfurt/ Main: Peter Lang, 337-351.
- **Trilingual Learner Corpus illustrating European Reference Levels,** (Nat)
Andrea Abel, Katrin Wisniewski, **Lionel Nicolas**, Adriane Boyd, Jirka Hana and Detmar Meurers,
In **Ricognizioni** – Rivista die Lingue, Letterature e Culture Moderne.

2014

- **InterHist - an interactive visual interface for corpus exploration,** (Int)
Verena Lyding, **Lionel Nicolas** and Egon Stemle,
Proceedings of **LREC 2014**, Reykjavik, Iceland.
- **KoKo: An L1 learner corpus for German,** (Int)
Andrea Abel, Aivars Glaznieks, **Lionel Nicolas** and Egon Stemle,
Proceedings of **LREC 2014**, Reykjavik, Iceland.
- **The MERLIN corpus: Learner language and the CEFR,** (Int)
Adriane Boyd, Jirka Hana, **Lionel Nicolas**, Detmar Meurers, Katrin Wisniewski & al.,
Proceedings of **LREC 2014**, Reykjavik, Iceland.
- **Establishing a Standardised Procedure for Building Learner Corpora,** (Int)
Aivars Glaznieks, **Lionel Nicolas** and Egon Stemle, Andrea Abel & Verena Lyding,
Apples - Journal of Applied Language Studies.

2013

- **High-accuracy phrase translation acquisition through batte-royale selection,** (Int)
Lionel Nicolas, Egon W. Stemle, Klara Kranebitter and Verena Lyding,
Proceedings of **RANLP 2013**, Hisarya, Bulgaria.
* Acceptance rate 12% (full paper) + Young Researcher Best Paper Award *
- **Open Corpus Interface for Italian Language Learning,** (Int)
Verena Lyding, Claudia Borghetti, Henrik Dittmann, **Lionel Nicolas** and Egon Stemle,
Proceedings of **ICT For Language Learning 2013**, Firenze, Italy.

- **MERLIN: An online trilingual learner corpus empirically grounding the European Reference Levels in authentic learner data,** *(Int)*
Katrin Wisniewski, Karin Schöne, **Lionel Nicolas**, Chiara Vettori, Adriane Boyd & al.,
Proceedings of **ICT For Language Learning 2013**, Firenze, Italy.
 - **A Trilingual Learner Corpus illustrating European Reference Levels,** *(Int)*
Andrea Abel, **Lionel Nicolas**, Jirka Hana, Barbora Štindlová, Katrin Wisniewski & al.,
Proceedings of **LCR 2013**, Bergen, Norway.
 - **StirWaC, Compiling a diverse corpus based on texts from the web for South Tyrolean German,** *(Int)*
Sarah Schulz, Verena Lyding and **Lionel Nicolas**,
Proceedings of **CL 2013 WAC-8 Workshop**, Lancaster, England.
- 2012**
- **Towards high-accuracy bilingual sequence acquisition from parallel corpora,** *(Nat)*
Lionel Nicolas, Egon W. Stemle and Klara Kranebitter,
Proceedings of the **Konvens 2012 Workshop RdaIr**, Vienna, Austria.
 - **Unsupervised acquisition of concatenative morphology,** *(Int)*
Lionel Nicolas, Jacques Farré and Cécile Darne,
Proceedings of **LREC 2012**, Istanbul, Turkey.
- 2011**
- **Enriching Lexica through Unsupervised Derivational Rule Acquisition,** *(Int)*
Géraldine Walther and **Lionel Nicolas**,
Proceedings of the **Esslli 2011's International Workshop WoLeR**, Ljubljana, Slovenia.
- 2010**
- **Efficient production of linguistic resources: the Victoria Project,** *(Int)*
Lionel Nicolas,
PhD Manuscript, RL team, I3S laboratory, University of Nice Sophia-Antipolis, France.
 - **Unsupervised learning of morphology based on frequency-related form occurrence,** *(Int)*
Lionel Nicolas, Jacques Farré and Miguel A. Molinero,
Proceedings of **MorphoChallenge 2010**, Espoo, Finland.
 - **Creating and maintaining language resources: the main guidelines of the Victoria project,** *(Int)*
Lionel Nicolas, Miguel A. Molinero, Benoît Sagot & al.,
Proceedings of the **LRSLM workshop of LREC 2010**, Valletta, Malta.
- 2009**
- **Towards efficient production of linguistic resources: the Victoria Project,** *(Int)*
Lionel Nicolas, Miguel A. Molinero, Benoît Sagot & al.,
Proceedings of **RANLP 2009**, Borovets, Bulgaria.
* Acceptance rate 35% (short paper) *
 - **A morphological and syntactic wide-coverage lexicon for Spanish: the *leffe*,** *(Int)*
Miguel A. Molinero, Benoît Sagot and **Lionel Nicolas**,
Proceedings of **RANLP 2009**, Borovets, Bulgaria.
* Acceptance rate 35% (short paper) *
 - **Producción eficiente de recursos lingüísticos: el proyecto Victoria,** *(Nat)*
Lionel Nicolas, Miguel A. Molinero, Benoît Sagot & al.,
Proceedings of **SEPLN 2009**, St. Sebastian, Spain.
 - **Construcción y extensión de un léxico morfológico y sintáctico para el Español: el *leffe*,** *(Nat)*
Miguel A. Molinero, Benoît Sagot and **Lionel Nicolas**,
Proceedings of **SEPLN 2009**, St. Sebastian, Spain.

- **Trouver et confondre les coupables: un processus sophistiqué de correction de lexique,** *(Nat)*
Lionel Nicolas, Benoît Sagot, Miguel A. Molinero, Jacques Farré and Éric de La Clergerie,
Proceedings of **TALN 2009**, Senlis, France.
* **Acceptance rate 27% ***
 - **Building a morphological and syntactic lexicon by merging various linguistic resources,** *(Int)*
Miguel A. Molinero, Benoît Sagot and **Lionel Nicolas**,
Proceedings of **NODALIDA 2009**, Odense, Denmark.
 - **FRMG: évolutions d'un analyseur syntaxique TAG du français,** *(Nat)*
Éric De La Clergerie, Benoît Sagot, **Lionel Nicolas** and Marie-Laure Guénot,
Proceedings of **Journée de l'ATALA**, Paris, France.
- 2008**
- **Mining Parsing Results for Lexical Correction: toward a Complete Correction Process of wide-coverage Lexicons,** *(Int)*
Lionel Nicolas, Benoît Sagot, Miguel A. Molinero, Jacques Farré and Éric de La Clergerie,
Proceedings of **L&TC Lnai best papers 2007**, Poznan, Poland.
 - **Computer aided correction and extension of a syntactic wide-coverage lexicon,** *(Int)*
Lionel Nicolas, Benoît Sagot, Miguel A. Molinero, Jacques Farré and Éric de La Clergerie,
Proceedings of **COLING 2008**, Manchester, England.
* **Acceptance rate 24% ***
 - **Extensión y corrección semi-automática de léxicos morfo-sintáctico,** *(Nat)*
Lionel Nicolas, Benoît Sagot, Miguel A. Molinero, Jacques Farré and Éric de La Clergerie,
Proceedings of **SEPLN 2008**, Madrid, Spain.
- 2007**
- **Mining Parsing Results for Lexical Corrections,** *(Int)*
Lionel Nicolas, Éric de La Clergerie and Jacques Farré,
Proceedings of **L&TC 2007**, Poznan, Poland.
 - **Corrections d'un lexique suggérées par une grammaire,** *(Nat)*
Lionel Nicolas, Éric de La Clergerie and Jacques Farré,
Proceedings of **TALN 2007**, Toulouse, France.

Committees

- 2018** Scientific committee, Language Resources and Evaluation Conference (**LREC 2018**)
Scientific committee, conference on Computational Linguistics (**Coling 2018**)
Scientific committee, conference of the European association for lexicography (**EURALEX 2018**)
Scientific committee, conference on electronic lexicography (**eLex 2018**)
- 2017** Scientific committee the conference on electronic lexicography (**eLex 2017**)
- 2016** Scientific committee for the Language Resources and Evaluation Conference (**LREC 2016**)

Project Leading

- **Chair of the enetCollect COST Action**
Since March 2017
- **Project Learder of the LCI project**
Since January 2016

- **EnetCollect, a new COST Action of interest for the NLP community, Games4NLP Workshop, LREC 2018, Miyazaki, Japan.** (Int)

Funding

Accepted (Acp) - Rejected (Rej)

2017

- **Type :** Marie Curie Individual Fellowship (Rej)
Title & Aims : “WikiCollect”, combining language learning and crowdsourcing techniques to enhance WIKIcontents
Contribution : Partner
Funding Body : European Commission, Horizon 2020

2016

- **Type :** Large network project (Acp)
Date : April 2017 / March 2021
Title & Aims : “EnetCollect, European Network for Combining Language Learning with Crowdsourcing Techniques”, creation of a new R&I trend community
Contribution : Main author
Funding Body : COST Action
- **Type :** Large local research project (Acp)
Date : January 2017 / December 2019
Title & Aims : “DIOSS: Digitale Infrastruktur für das Ökosystem Südtiroler Sprachdaten und dienste”, creation of a digital Instructure for South-Tyrolean language-related key players
Contribution : Second main author
Funding Body : Province of South Tyrol & Eurac Research
- **Type :** Phd grant (Acp)
Date : October 2016 / September 2019
Title & Aims : “DAMICO: Data-mining in corpus linguistics”, using machine-learning based data-mining to support corpus linguistic research
Contribution : Second main author
Funding Body : Eurac Research Internal Funding

2015

- **Type :** Local research project (Acp)
Date : April 2016 / March 2018
Title & Aims : “LCI: Learner Corpora Infrastructure”, development and enhancement of specialized tools for the creation of Learner Corpora
Contribution: Main author
Funding Body: Eurac Research Internal Funding
- **Type :** European research project. (Rej)
Title & Aims : “BLLISS: Bootstrapping Language Learning Interactive Symbiotic Suite”, creation of a Language Learning environment with crowdsourcing abilities.
Contribution : Main author
Funding Body : European Commission, Horizon 2020

2014

- **Type :** Local research project (Rej)
Title & Aims : “MAS: Massen-Methodologie für die Akquirierung von Sprachressourcen”, creation of a Language Learning environment with crowdsourcing abilities
Contribution : Second main author
Funding Body : Province of South Tyrol, Legge 14

2013

- **Type :** **European Research project** *(Rej)*
Title & Aims : “Consensus: Contextual and Semantic Search in Heterogeneous Data Resources”
Contribution: Partner
Funding Body : European Commission, Horizon 2020

2011

- **Type :** **Large national research project** *(Acp)*
Date : **February 2011 / February 2013**
Title & Aims : “Plataforma de conocimiento Lingüístico”, development of tools to enhance the creation of Spanish linguistic resources
Contribution : Main author
Funding Body : Spanish center for the technological development

2008

- **Type :** **Post-doc grant** *(Acp)*
Date : **November 2008 / November 2009**
Title & Aims : Automatized acquisition and correction of lexicalized grammar
Contribution : Main author
Funding Body : University of Nice Sophia Antipolis, France
- **Type :** **Local research project** *(Acp)*
Date : **November 2008 / April 2011**
Title & Aims : “Victoria project”, efficient production of linguistic resources
Contribution : Main author
Funding Body : Province of Galicia, Spain

Training attended

National (Nat) - International (Int)

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| 2018 | Workshop on Social Media for Scientists , EURAC, Bolzano, Italy <i>(Nat)</i> |
| | Workshop on Meeting Moderation , EURAC, Bolzano, Italy <i>(Nat)</i> |
| 2017 | Workshop on Leadership Skills for Future Leaders , EURAC, Bolzano, Italy <i>(Nat)</i> |
| | Workshop for COST Action grant holders , Cost offices, Brussels, Belgium <i>(Int)</i> |
| | Workshop for COST Action main proposers , Cost offices, Brussels, Belgium <i>(Int)</i> |
| 2016 | European Summer School in Logic, Language and Information (ESSLI) , UniBz, Bolzano, Italy <i>(Int)</i> |
| | Workshop on Addressing Exploitation and Managing Innovation , EURAC, Bolzano, Italy <i>(Nat)</i> |
| | Workshop on Improved Reading , EURAC, Bolzano, Italy <i>(Nat)</i> |
| | Workshop on Project Management , EURAC, Bolzano, Italy <i>(Nat)</i> |
| 2015 | School on Data Analysis and Programming with R , UniBz, Bolzano, Italy <i>(Int)</i> |
| | Workshop on Opinio , UniBz, FBK, Bolzano, Italy <i>(Nat)</i> |
| | Workshop on Intellectual Property Rights , EURAC, Bolzano, Italy <i>(Nat)</i> |
| | Workshop on Scientific Research on the Internet , EURAC, Bolzano, Italy <i>(Nat)</i> |
| 2014 | IX Machine Translation Marathon , FBK, Trento Italy <i>(Int)</i> |
| | Workshop on Convincing presentation techniques , EURAC, Bolzano, Italy <i>(Nat)</i> |
| 2013 | Workshop on Project Writing for Experienced Staff , EURAC, Bolzano, Italy <i>(Nat)</i> |
| | Workshop on Project Budgeting for Experienced Staff , EURAC, Bolzano, Italy <i>(Nat)</i> |
| 2011 | Lisbon Machine Learning School (LXLMS) , Lisbon, Portugal <i>(Int)</i> |
| 2009 | European Summer School in Logic, Language and Information (ESSLI) , Bordeaux, France <i>(Int)</i> |
| | École d'Été Méthodes Info et Stat en Analyse de Textes (MISAT) , Besançon, France <i>(Nat)</i> |
| 2007 | European Summer School in Logic, Language and Information (ESSLI) , Dublin, Ireland <i>(Int)</i> |

Scientific events attended

National (Nat) - International (Int)

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- | | |
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| 2018 | International Conference on Language Resources and Evaluation (LREC) , Miyazaki, Japan <i>(Int)</i> |
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2017	Conferenza Italiana di Linguistica Computazionale (CLIC-IT) , Rome, Italy	<i>(Nat)</i>
	South Tyrolean Free Software Conference (SFSCon) , Bolzano, Italy	<i>(Nat)</i>
2016	CLARIN ERIC Conference (CAC) , Aix en Provence, France	<i>(Int)</i>
	South Tyrolean Free Software Conference (SFSCon) , Bolzano, Italy	<i>(Nat)</i>
2015	CLARIN ERIC Conference (CAC) , Wroclaw, Poland	<i>(Int)</i>
	Conferenza Italiana di Linguistica Computazionale (CLIC-IT) , Trento, Italy	<i>(Nat)</i>
	eLex Conference , Sussex, England	<i>(Int)</i>
2014	CLARIN ERIC Conference (CAC) , Soesterberg, Netherlands	<i>(Int)</i>
	ILIAS , Bolzano, Italy	<i>(Int)</i>
	International Conference on Language Resources and Evaluation (LREC) , Reykjavik, Iceland	<i>(Int)</i>
2013	ICT for Language Learning , Florence, Italy	<i>(Int)</i>
	CLARIN ERIC Conference (CAC) , Prague, Czech Republic	<i>(Int)</i>
	Recent Advances in Natural Language Processing (RANLP) , Hisarya, Bulgaria	<i>(Int)</i>
	Compiling and using learner corpora , Padua, Italy	<i>(Int)</i>
2012	CLARIN ERIC Conference , Sophia, Bulgaria	<i>(Int)</i>
	Workshop Recent developments and applications of lexical-semantic resources , Vienna, Austria	<i>(Nat)</i>
	International Conference on Language Resources and Evaluation (LREC) , Istanbul, Turkey	<i>(Int)</i>
2010	MorphoChallenge 2010 - Semi-supervised and Unsupervised Analysis , Espoo, Finland	<i>(Int)</i>
	International Conference on Language Resources and Evaluation (LREC) , Valletta, Malta	<i>(Int)</i>
2009	Recent Advances in Natural Language Processing (RANLP) , Borovets, Bulgaria	<i>(Int)</i>
	Congreso para el Procesamiento del Lenguaje Natural (SEPLN) , San Sebastian, Spain	<i>(Nat)</i>
	Conférence sur le Traitement Automatique des Langues Naturelles (TALN) , Senlis, France	<i>(Nat)</i>
2008	Congreso para el Procesamiento del Lenguaje Natural (SEPLN) , Madrid, Spain	<i>(Nat)</i>
	International Conference on Computational Linguistics (COLING) , Manchester, England	<i>(Int)</i>
	Conférence sur le Traitement Automatique des Langues Naturelles (TALN) , Avignon, France	<i>(Nat)</i>
	Workshop sur le Traitement Automatique des Langues (NATAL) , Nancy, France	<i>(Nat)</i>
2007	3rd Language & Technology Conference (L&TC) , Poznan, Poland	<i>(Int)</i>
	Conférence sur le Traitement Automatique des Langues Naturelles (TALN) , Toulouse, France	<i>(Nat)</i>

Teaching Experience

Teaching lectures (Mc), theoretical classes (Td) and practical classes (Tp)

2011-2012	Assistant Teacher	Campus Valrose, University of Nice Sophia-Antipolis	139h
<u>Licence 1 Math-Info</u>			
	Soutien en Programmation fonctionnelle , introduction to functional programming via Scheme		Td, 13h
	Introduction à la Programmation fonctionnelle , introduction to functional programming via Scheme		Tp, 38h
	Informatique générale , introduction to fundamental aspects of computer science		Tp, 48h
<u>Master 1 Miage</u>			
	Compilation et Xml , intermediate classes of XML and related technologies		Td, 40h
2009-2010	Assistant Teacher	Campus Valrose, University of Nice Sophia-Antipolis	96h
<u>Licence 1 Math-Info</u>			
	Introduction au web , introduction to Web programming via Html et Css		Tp, 3h
	Introduction à la Programmation Objet , introduction to object-oriented programming via Java		Td, 18h
	Informatique générale , introduction to fundamental aspects of computer science		Td, 18h
<u>Licence 3 Info</u>			
	Compilation , intermediate classes on parsing via Flex/Yacc		Td, 2h
	Concurrence , intermediate classes on parallel programming		Td, 16h
	Stage en entreprise , monitoring of 6-weeks student internship		Tp, 6h
<u>Master 1 Miage</u>			
	Systèmes distants et Xml , intermediate classes of XML and related technologies		Td, 21h
<u>Master 1 Info</u>			
	Programmation objet en C++ , advanced course on object-oriented programming via C++		Td, 12h

2008-2009	Assistant Teacher	Campus Valrose, University of Nice Sophia-Antipolis	57h
<u>Licence 1 Math-Info</u>			
Introduction à la Programmation fonctionnelle , introduction to functional programming via Scheme			Tp, 24h
Introduction à la Programmation C , introduction to programming via C			Tp, 28h
<u>Master 1 Info</u>			
Projet de fin d'année , monitoring of students for a 2-months project			Tp, 5h
2007-2008	Assistant Teacher	Campus Valrose, University of Nice Sophia-Antipolis	66h
<u>Licence 2 Math-Info</u>			
Programmation Impérative C , intermediate classes on programming via C			Tp, 24h
<u>Licence 3 Info</u>			
Compilation , intermediate classes on parsing via Flex/Yac			Td, 24h
Éléments de Génie Logiciel , intermediate classes on software engineering via UML			Td, 18h
2006-2007	Assistant Teacher	Campus Valrose, University of Nice Sophia-Antipolis	68h
<u>Licence 1 Math-Info</u>			
Introduction à la Programmation Objet , introduction to object-oriented programming via Java			Tp, 16h
<u>Licence 1 Mass</u>			
Algorithmique et Calcul Formel , introduction to algorithms and computer algebra			Tp, 12h
<u>Licence 2 Math-Info</u>			
Programmation Impérative C , intermediate classes on programming via C			Tp, 24h
<u>Licence 3 Info</u>			
Compilation , intermediate classes on parsing via Flex/Yac			Tp, 16h

Languages

- **French** Mother tongue
- **English** Very Fluent
- **Spanish** Very Fluent (Dele superior)
- **Italian** Very Fluent
- **German** Beginner

Hobbies

- **Basketball**
- **Running**
- **Learning languages**
- **Traveling**