

# Gledel Valentin | Curriculum Vitae

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## Education

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<b>LIRIS - Université Claude Bernard Lyon 1 - Team GOAL</b> <i>PhD student in theoretical computer science</i> Under the supervision of Eric Duchêne and Aline Parreau	<b>September 2016 – Today</b> <i>Lyon</i>
<b>École Normale Supérieure de Lyon (ENSL)</b> <i>2nd year of Master - Theoretical Computer Science specialisation</i>	<b>September 2015 – June 2016</b> <i>Lyon</i>
<b>Technische Universität München (TUM)</b> <i>Semester of Master in Computer Science</i> As part of an Erasmus exchange	<b>April 2015 – August 2015</b> <i>Munich</i>
<b>ENSL</b> <i>1st year of Master - Theoretical Computer Science specialisation</i>	<b>2013–2015</b> <i>Lyon</i>
<b>ENSL</b> <i>3rd year of Bachelor - Theoretical Computer Science specialisation</i>	<b>2012–2013</b> <i>Lyon</i>
<b>Lycée Chateaubriand</b> <i>Higher School Preparatory Classes: MPSI/MP/MP*</i> Admission to the ENS Lyon on competitive exam	<b>2009–2012</b> <i>Rennes</i>

## Work Experience

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### Teaching.....

#### **Practical and Exercise sessions** **Scholar years 2016/2017 to 2018/2019**

*As part of ACE duties*

Courses : "Databases and Web programming", "Architecture and systems", "Optimisation and Operational Research", " Algorithmic Imperative programming, Initiation" et "Algorithms and Object Oriented Programming".

### Research stays.....

#### **Stay at Ljubljana** **February 2018 – June 2018**

*Strong geodetic number and Maker-Breaker domination game*

Séjour à Ljubljana, au sein du FMF (Faculty of Mathematics and Physics), qui a mené à des collaborations sur les sujets du nombre géodésique fort et du jeu de domination Maker-Breaker. J'ai travaillé avec Sandi Klášar et Vesna Iršič et nos recherches ont débouchées sur trois soumissions et d'autres travaux sont toujours en cours.

## Internships.....

### 2nd year of Master's internship

February 2015 – June 2015

*Edge colouring without crossings*

*Under the supervision of Aline Parreau and Eric Duchêne*

We introduced a new parameter, the non-crossing chromatic index. This parameter is defined as the minimum number of colors needed to color each edge of the graph such that no two adjacent edges have the same color and there exists a planar representation of the graph such that no two crossing edges have the same color. Related to the chromatic index, the non-crossing chromatic index also induce a strong geometrical aspect.

### 1st year of Master's internship

September 2014 – February 2015

*Identification of points using disks*

*Under the supervision of Aline Parreau*

Having a set of points in the plane, the problem consists of finding a set of disks in the plane such that each point belongs to a unique and non-empty subset of disks. We want to determine the minimum number of disks needed to achieve that for every starting set of points. This internship led to a publication in Discrete Mathematics.

## Publications in international journals

### Maker-Breaker domination number

BMMS

*with Sandi Klášar and Vesna Iršič*

*To appear*

<https://arxiv.org/abs/1810.04397>

<https://hal.archives-ouvertes.fr/hal-01935244>

### Identification of points using disks

Discrete Mathematics

*with Aline Parreau*

*January 2019*

<https://doi.org/10.1016/j.disc.2018.10.002>

### A generalization of Arc-Kayles

International Journal of Game Theory

*with Antoine Dailly and Marc Heinrich*

*October 2018*

<https://doi.org/10.1007/s00182-018-0639-5>

## Papers submitted in international journals

### Maker-Breaker total domination game

Submitted

*with Michael Henning, Sandi Klášar and Vesna Iršič*

*February 2019*

<https://arxiv.org/abs/1902.00204>

<https://hal.archives-ouvertes.fr/hal-02021678>

### Strong geodetic number of complete bipartite graphs, crown graphs and hypercubes

Submitted

*with Vesna Iršič*

*October 2018*

<https://arxiv.org/abs/1810.04004>

<https://hal.archives-ouvertes.fr/hal-01892332>

### Maker-Breaker domination game

Submitted

*with Eric Duchêne, Aline Parreau and Gabriel Renault*

*September 2018*

<https://arxiv.org/abs/1807.09479>

<https://hal.archives-ouvertes.fr/hal-01848805>

### Power domination on triangular grids with triangular and hexagonal shape

Submitted

*with Prosenjit Bose, Claire Pennarun and Sander Verdonschot*

*June 2018*

<https://hal.archives-ouvertes.fr/hal-01814346>

### Strong geodetic cores and Cartesian product graphs

Submitted

*with Sandi Klášar and Vesna Iršič*

*March 2018*

<https://arxiv.org/abs/1803.11423>

<https://hal.archives-ouvertes.fr/hal-01756450>

## Talks

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<b>Fast winning strategies for the Maker-Breaker domination game LAGOS</b> - Belo Horizonte <i>with Sandi Klášar and Vesna Iršič</i>	June 2019
<b>Strong geodetic number and cartesian product</b> <i>with Sandi Klášar and Vesna Iršič</i>	JGA - Grenoble November 2018
<b>Power domination on triangular grids</b> <i>with Prosenjit Bose, Claire Pennarun and Sander Verdonschot</i>	ICGT - Lyon July 2018
<b>Maker-Breaker domination game</b> <i>with Eric Duchêne, Aline Parreau, Gabriel Renault and Simon Schmidt</i>	JGA - Bordeaux November 2017
<b>Weighted Arc-Kayles</b> <i>with Antoine Dailly and Marc Heinrich</i>	CGTC - Lisbon January 2017
<b>Identification of points using disks</b> <i>with Aline Parreau</i>	JGA - Paris November 2016

## Miscellaneous

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Scientific popularization.....

**MATH.en.JEANS** **2014-2019**  
*Introduction to research* *with Aline Parreau*  
Interventions in schools to propose research subjects adapted to the level of students and to guide them in their researches.

**Maths à Modeler** **2015-2017**  
*Introduction to research*  
Interventions in classes, at the "Maison des Maths et de l'Informatique de Lyon" (house of mathematics and computer science of Lyon) or during events of the same type as the science festival, to propose small discrete mathematics subjects to students from elementary school to high school.

**Talks** **2017**  
*In the scope of an "Expresso" talk at Lyon 1 and of the french science festival*  
Talks aiming to explain the concept of algorithms to a public of all ages.

Languages and computer science skills.....

**French:** Native speaker

**English:** Fluent, C1 level

**Computer Languages:** Ocaml, Latex, basics of C, C++, Java and Python

Interests.....

**Voluntary activities:** "Moi je m'en fous je triche" a board games café

**Others:** Climbing, Judo, Chess, Go, Board games