Guillaume Braun

PhD Candidate

Education

2020- Dec. 2022	**Applied Mathematics and Computer Science Thesis**, *PhD, Inria Lille - Nord Europe-MODAL team, France* *Topic : « Efficient iterative methods for clustering and matching problems on graphs »* *Supervisors : Christophe Biernacki, Hemant Tyagi.*
2015-2017	**Civil servant student at Ensai**, *National School for Statistics and Information Analysis*, Rennes, France.
2014–2015	**Master's Degree in Functional Analysis**, *Université de Franche-Comté*, Besançon, France, *first class honors*.
2012	« **Agrégation de mathématiques** », *French competitive exam to qualify High School teachers in Mathematics*.
2010–2011	**Master's Degree in Math Education**, *Université de Strasbourg, France*.

Work Experience

Since 2015	**Insee statistician Attaché (civil servant statistician)**.
2011–2015	**High-school Teacher**.

Publications and preprints

2022	**Minimax Optimal Clustering of Bipartite Graphs with a Generalized Power Method**, *G. Braun, H. Tyagi*, ArXiv : 2205.12104, submitted to Information and Inference.
2022	**Seeded graph matching for the correlated Wigner model via the projected power method**, *E. Araya, G. Braun, H. Tyagi (*)*, ArXiv : 2204.04099, submitted to JMLR. (*) : authors in alphabetical order
2021	**An iterative clustering algorithm for the Contextual Stochastic Block Model with optimality guarantees**, *G. Braun, H. Tyagi, C. Biernacki*, ICML 2022, p.2257-2291.
2020	**Clustering on multilayer graphs with missing values**, *G. Braun, H. Tyagi, C. Biernacki*, AISTATS 2021, p.2260-2268.

Talks and Posters

2022	**An iterative clustering algorithm for the Contextual Stochastic Block Model with optimality guarantees**, *Poster Session and spotlight talk*, ICML 2022.
2021	**An iterative clustering algorithm for the Contextual Stochastic Block Model with optimality guarantees**, MODAL seminar (online).
2021	**Clustering graphs with side information**, SPSR Workshop - Bucharest (online).

2021	**Clustering on multilayer graphs with missing values**, *Poster Session*, AISTATS 2021 (online).
2020	**Clustering on multilayer graphs with missing values**, MODAL seminar (online).

Additional duties

Reviewer for *AISTATS 2021, AISTATS 2022, ICML 2022.*

June - July 2022	**Internship supervisor** *of Maxence Buisson,* a third year undergraduate student in Engineering School.

Skills

Computer	**R**, **Python**, **SQL**
Languages	**French** (native), **English** (fluent, TOEIC 925), **Japanese** (fluent, JLPT N1)

References

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