

# Anthony Dugois

PhD Candidate in Computer Science  
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## Experience

- 2020– **PhD Candidate at ENS Lyon**, supervised by Loris Marchal and Louis-Claude Canon in the LIP (Laboratoire de l'Informatique du Parallélisme). Scheduling in distributed key-value stores.
- 2020 **Intern at FEMTO-ST** (Besançon), supervised by Louis-Claude Canon and Loris Marchal. Bibliographic synthesis: request scheduling in distributed databases (6 months).
- 2019 **Intern at Univ. Catholique de Louvain** (Louvain-la-Neuve, Belgique), supervised by Etienne Rivière. Discrete-event simulation of key-value store systems (1 month).
- 2019 **Intern at ENS Lyon**, supervised by Loris Marchal and Louis-Claude Canon. Research initiation: request scheduling in replicated databases (2 months).

## Education

- PhD** PhD thesis in Computer Science at École Normale Supérieure de Lyon, supervised by Loris Marchal and Louis-Claude Canon since october 2020.
- Master** Master (equivalent to a Master's degree) in Computer Science at Univ. de Franche-Comté (Besançon). System & Software Engineering. 2018–2020.
- Licence** Licence (equivalent to a Bachelor's degree) in Computer Science at Univ. de Franche-Comté (Besançon). 2015–2018.

## Skills

- Academic** Scheduling Theory, Approximation Algorithms, Parallel Algorithms, Distributed Systems, Networks, Logic.
- Technical** C, C++, Python, R, Java, SQL, MPI.
- Language** English, French.

# Teaching

Tutorials (TD) and Practical Work (TP) are made in parallel to research activities. For each module, groupe sizes range from 10 to 15 students. The target audience comes from École Normale Supérieure de Lyon (ENSL) and Université de Franche-Comté (UFC).

| Year      | Module  | Audience | Level | Type   | Duration (hTD) |
|-----------|---|----------|-------|--------|----------------|
| 2022–2023 | Basics of Computer Programming Networks             | UFC      | L1    | TD/TP  | 52             |
|           |   | UFC      | M1    | TP     | 12             |
| 2021–2022 | Logic Circuits & Networks                           | ENSL     | L3    | TD/TP  | 32             |
|           | Parallel Algorithms & Distributed Programs          | ENSL     | M1    | TD/TP  | 32             |
| 2020–2021 | Architecture, System & Networks Programming Project | ENSL     | L3    | TD/TP  | 32             |
|           |   | ENSL     | M1    | Projet | 32             |

## Research Publications

Authors are sorted in alphabetical order.

### International Conference Proceedings

- [1] L.-C. Canon, A. Dugois, and L. Marchal, “Bounding the flow time in online scheduling with structured processing sets”, in *36th IEEE International Parallel & Distributed Processing Symposium*, 2022, [Link to PDF](#).
- [2] S. Ben Mokhtar, L.-C. Canon, A. Dugois, L. Marchal, and E. Rivière, “Taming tail latency in key-value stores: A scheduling perspective”, in *27th International European Conference on Parallel and Distributed Computing*, 2021, pp. 136–150, [Link to PDF](#).

### Research Reports

- [3] L.-C. Canon, A. Dugois, and L. Marchal, “Bounding the flow time in online scheduling with structured processing sets (extended version)”, Research Report, 2022, [Link to PDF](#).
- [4] S. Ben Mokhtar, L.-C. Canon, A. Dugois, L. Marchal, and E. Rivière, “Taming tail latency in key-value stores: A scheduling perspective (extended version)”, Research Report, 2021, [Link to PDF](#).

### Submitted Articles (under review)

- [5] L.-C. Canon, A. Dugois, and L. Marchal, “Low-cost algorithms for the restricted assignment problem on intervals of machines”, in *52nd International Conference on Parallel Processing*, 2023.
- [6] L.-C. Canon, A. Dugois, L. Marchal, and E. Rivière, “Hector: A framework to design and evaluate scheduling strategies in persistent key-value stores”, in *52nd International Conference on Parallel Processing*, 2023.

- [7] S. Ben Mokhtar, L.-C. Canon, A. Dugois, L. Marchal, and E. Rivière, “A scheduling framework for distributed key-value stores and its application to tail latency minimization”, *Journal of Scheduling*, 2023.

## Research Presentations

### International Conferences

- Bounding the Flow Time in Online Scheduling under Structured Processing Sets, 2022, june 1, IPDPS 2022, videoconference (en).
- Taming Tail-Latency in Key-Value Stores: a Scheduling Perspective, 2021, september 2, EuroPar 2021, videoconference (en).

### Workshops

- Bounding the Flow Time in Online Scheduling under Structured Processing Sets, 2022, november 25, Groupe de Travail GOTHa, Metz (fr).
- Bounding the Flow Time in Online Scheduling under Structured Processing Sets, 2022, august 30, Journée des doctorants, Mésandans (fr).
- Bounding the Flow Time in Online Scheduling under Structured Processing Sets, 2022, may 17, Scheduling Workshop, Aussois (en).
- A Scheduling Framework for Distributed Key-Value Stores and Application to Tail Latency Minimization, 2022, april 13, Groupe de Travail SCALE, Besançon (fr).
- Bounding the Flow Time in Online Scheduling under Structured Processing Sets, 2021, december 3, Groupe de Travail SCALE, Lyon (fr).