



SAAD DAHLAB UNIVERSITY

Faculty of science

In Computer Science Department

DOCTORAL THESIS

Speciality: Computer and Data Sciences

PROPOSITION OF SCALABLE DATA STRUCTURE FOR THE OPTIMIZATION
OF RECOMMENDED QUERIES

Through

MUSTAPHA CHABA MOUNA

Before the jury composed of:

- | | | |
|----------------|---------------------------------|--------------|
| H. Abed | Professor. Blida 1 University | President |
| N. Boustia | Professor. Blida 1 University | Reporter |
| L. Bellatreche | Professor, ISAE-ENSMA, France | Co. Director |
| F. Boumahdi | A.Professor. Blida 1 University | Examiner |
| K. Boukhalfa | Professor. ENSIA, Algeria | Examiner |

**The thesis will be publicly defended on May 11, 2023, at 10h am, in
the conference room at the Pavilion 8**