



Erkin Tunc Boya

Backend Development / Software Engineering Internship

Java – Python – Django – SQL – JUnit 5 – Relational Data Modelling

Based in Clermont-Ferrand, France • Hybrid / Remote • +33 7 49 74 39 99

erkintuncboya@hotmail.com • LinkedIn • GitHub • Portfolio

PROFILE

Computer Science graduate from Université Clermont Auvergne and enrolled in the first year of the Master's programme in Computer Science beginning in September 2026. I am seeking an internship in backend development or software engineering. My projects focus on object-oriented design, relational data modelling, business rules, access control, and unit testing using Java, Python, Django, and SQL.

SELECTED PROJECTS

Jan. 2025 – May 2025 **Collaborative Task Backend – Django, SQLite**

- Developed a multi-user backend supporting public and private tasks, teams, subtasks, and user profiles.
- Designed a relational Task–User–Team data model, with subtasks implemented through a directed self-referential relationship.
- Implemented server-side access control and business rules based on creator, collaborator, team member, and superuser roles.

Apr. 2026 – May 2026 **Flight Management – Java, Gradle, JUnit 5, Design Patterns**

- Designed an object-oriented flight management system covering airlines, flights, airports, passengers, payments, and reservations.
- Implemented design patterns for pricing, reservation creation, and reservation lifecycle management.
- Developed JUnit 5 unit tests covering input validation, business invariants, state transitions, and domain rules.

Nov. 2025 – Dec. 2025 **B-Tree Index Engine – Java, Data Indexing**

- Implemented a balanced B-Tree with insertion, node splitting, and preservation of the tree's structural properties.
- Implemented exact-match, range, and prefix searches with logarithmic time complexity.
- Indexed a real-world dataset of approximately 35,000 entries and conducted performance tests.

EDUCATION

From Sep. 2026

Master's Programme in Computer Science, Université Clermont Auvergne / ISIMA
Enrolled in the first year of the Master's programme (M1)

2022 – 2026

Bachelor's Degree in Computer Science, Université Clermont Auvergne
Degree awarded in July 2026

- Software development: Algorithms and Programming II–IV, Web Technologies, and Object-Oriented Programming
- Data, systems, and foundations: Advanced Databases, Graph Theory, Compilation, Computer Architecture, Systems Programming, and Networks

2018 – 2022

Foreign Secondary Education Diploma equivalent to the French Baccalauréat, Saint-Joseph High School of İzmir – Turkey

TECHNICAL SKILLS

Backend & Data

Django • SQL • SQLite • Relational Data Modelling • Access Control

Programming

Java • Python • C • JavaScript • Object-Oriented Programming

Software Quality

JUnit 5 • Unit Testing • Design Patterns • Modular Architecture • Input Validation

Algorithms & Tools

Data Structures • Graphs • Dynamic Programming • Complexity Analysis • Git • Linux • Gradle

LANGUAGES

French

B2 – DELF B2

English

B2 – TOEIC 875/990

Turkish

Native

Spanish

Beginner