

Edoardo Galli

Computer Science Undergraduate

Education

2021–2026 **B.Sc. Information Science for Management, University of Bologna**

GPA: 28/30 – A hybrid Computer Science curriculum engaging with both software engineering and corporate management strategies.

- **Relevant Coursework:** Software Engineering, Operating Systems, Algorithms & Data Structures, Information Systems, Web Technologies, Corporate Finance.

Project Experience

TypeScript, **Real-Time Collaborative Editor (sweng-notes), University of Bologna**

React github.com/edoski/sweng-notes

- Engineered a type-safe backend using **Convex**, using a custom **middleware factory** to inject RBAC policies into 50+ API endpoints.
- Optimized React rendering performance by splitting global state into multiple distinct **Context scopes**, preventing re-render cascades.
- Integrated **Liveblocks** and **Y.js** to synchronize ephemeral cursor presence and resolve concurrent document edits via CRDTs.

Java, **Multithreaded Client-Server Architecture (pubsub), University of Bologna**

Concurrency github.com/edoski/pubsub

- Built a raw TCP server using **CachedThreadPool** to dynamically scale worker threads based on client load.
- Enforced thread safety using **ConcurrentHashMap** for state management and atomic **synchronized blocks** for message snapshotting.
- Designed a custom Application Layer Protocol featuring an admin "Inspect Mode" that utilizes volatile flags to suspend client command processing in real-time.

PHP, SQL, **Crowdfunding Platform (bostarter), University of Bologna**

Mongo github.com/edoski/bostarter

- Architected a **Hybrid Persistence Layer** using **MySQL** (Stored Procedures) for transactional data and **MongoDB** for immutable audit logging.
- Implemented a custom **EventPipeline** class to abstract input validation, execution flow, and error handling across action scripts.
- Hardened security by strictly separating View logic from Business logic and enforcing **PDO** parameter binding.

Next.js, Tailwind **Personal Developer Portfolio, Personal Project**

edoski.com

- Developed a high-performance static site using **Next.js App Router** and React Server Components to minimize client-side hydration costs.
- Engineered custom interactive UI components using **Framer Motion** and Tailwind CSS.
- Integrated a Vercel CI/CD pipeline to automate production deployments.

Technical Skills

Languages Java, TypeScript, SQL, PHP, HTML5/CSS3

Frameworks Next.js, React, Tailwind CSS, JavaFX, Bootstrap

Tools & DB Git/GitHub, MySQL, MongoDB, Convex, Docker, Linux/Bash

Core Concepts OOP, Serverless Architecture, REST, Multithreading, MVC, CI/CD