

Thomas Vuille

Senior Software Engineer

Curious, self-driven and proactive, driven by problem-solving

- I design and develop robust software tailored to users.
- Speed and quality: I anticipate blockers before they waste time.
- I proactively work on diverse projects: business software and consumer applications.
- Beyond code: stepping back on architecture, sharing knowledge and making trade-offs.

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Phone : [+33 6 13 75 20 47](tel:+33613752047)

LinkedIn : <https://www.linkedin.com/in/thomas-vuille/>

GitHub : <https://github.com/newtomsoft>

Location : Lyon



[Full version](#)

Professional experiences

Creator & Developer

2026

MiniMaxPuzzle

Multilingual blog about logic puzzles (Nikoli). Automatic solving via Z3/OR-Tools, learn the rules, play online.

[Astro](#) [TypeScript](#) [Python](#) [Z3](#) [OR-Tools](#) [Vitest](#) [Stryker](#) [Playwright](#) [GitLab CI/CD](#)

Software Engineer, Lead C# / Blazor Developer

05/2025 - 01/2026

Blitz Business Service

Development of a debt collection software & lead dev of 3 junior developers.

[C# 12](#) [.NET 8](#) [Blazor WebAssembly](#) [MudBlazor](#) [SQL Server](#) [EF Core](#) [PostgreSQL](#) [Jenkins](#) [Gitea](#)

Creator & Developer

2024 - present

NewTomSoft

Development of puzzle-solving applications (Sudoku, Nonograms, Hitori, etc.) with logical constraint modeling using Z3 and OR-Tools.

[Python 3.12](#) [Z3](#) [OR-Tools \(CP-SAT\)](#) [Playwright](#) [Pytesseract](#) [PyCharm](#) [Git](#)

Software Engineer, Lead Developer

06/2023 - 12/2023

Addactis

Development of workflow software connecting different internal company solutions. Microservices architecture with GitLab CI/CD.

[C# 10](#) [.NET 6](#) [Angular 14](#) [TypeScript](#) [SQL Server](#) [EF Core](#) [GitLab CI/CD](#)

Software Engineer - Cybersecurity, Lead Developer

04/2022 - 04/2023

Sysdream

From-scratch development of cybersecurity software. Microservices architecture (C# backend, Angular frontend, Go agents).

[C# 10](#) [.NET 6](#) [Angular 14](#) [Go](#) [PostgreSQL](#) [EF Core](#) [RabbitMQ](#) [Linux](#)

C# .NET 6 Developer

10/2021 - 01/2022

CNR

Refactoring of WinForms VB.NET application to WPF C# .NET 6 with hexagonal architecture and EF Core 6. Oracle SQL database.

[C# 10](#) [.NET 6](#) [WPF](#) [EF Core](#) [Oracle SQL](#)

Software Engineer

11/2020 - 07/2021

Mersen

Refactoring of fuse resistance measurement software (legacy VB6 code). Hexagonal architecture, OPC/I-O communication, offline mode with sync.

[C#](#) [.NET Core 5](#) [WPF](#) [MVVM](#) [EF Core](#) [MySQL](#) [SQLite](#) [OPC](#)

C# .NET Trainer

10/2020

Start In Block / m2i

5-day training on C# and .NET for C++ developers: CLR, LINQ, EF, WPF/MVVM, ASP.NET MVC, TDD, Clean Code.

C# .NET WPF ASP.NET MVC TDD Clean Architecture

C# .NET Core Engineer

12/2019 - 03/2020

Maltem Consulting Group

From-scratch internal project on collaborative engagement. Design, development, unit & integration testing.

C# ASP.NET Core 3.1 EF Core SQL Server jQuery

C# ASP.NET Engineer

05/2019 - 09/2019

Collman Solutions / SNCF Réseau

Development of PMS (risk prevention software) for agent certification management, planning and control execution.

C# ASP.NET TFS

Business Owner - IT Services

10/2005 - 12/2016

d'clik pc

Home IT troubleshooting company. Prospection, hardware supply, installation, training, maintenance. SFR subcontracting.

C++ Engineer

09/2001 - 04/2004

SII

Major account projects: Thales Air Defence, Matra, DGA, APRR. Anti-aircraft defense simulator, missile guidance, highway traffic management.

C++

Education

Ajc Formation

07/2018 - 10/2018

C# Training - .NET ecosystem, Agile/Scrum, ASP.NET/MVC, WPF/XAML, Git, Azure, LINQ, EF, SQL Server

Polytech' Grenoble

09/1998 - 09/2001

Industrial Computer Engineering - C and C++, instrumentation, signal processing, automation

Portfolio

MiniMaxPuzzle

2026

Multilingual web app offering new logic puzzle grids every day (Sudoku-like). Grid generation, solving, and PDF export.

Astro 7 TypeScript Python Z3 OR-Tools Vitest Stryker Playwright GitLab CI/CD

[Production application](#)

Puzzle Solver

2024 - 2026

Logic puzzle solvers developed in Python: Sudoku, Nonogram, Binairo, Hitori, etc. Constraint modeling via Z3 SMT Solver and OR-Tools CP-SAT.

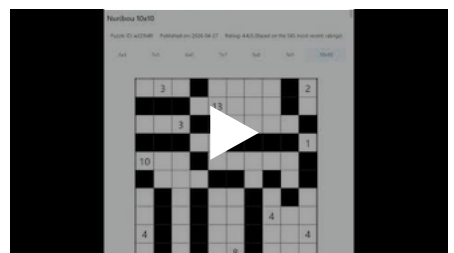
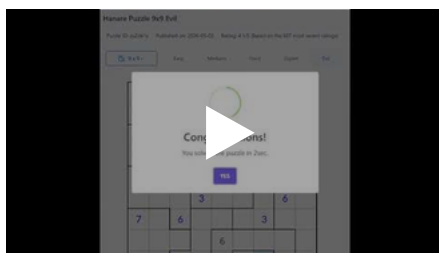
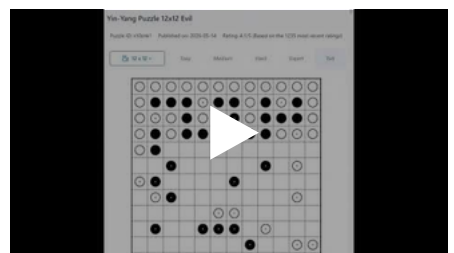
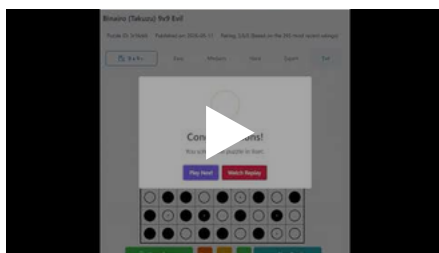
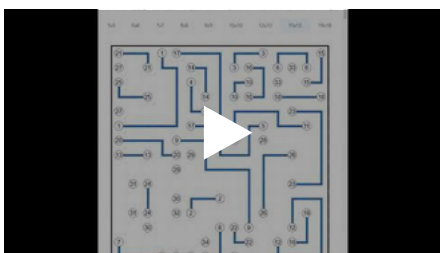
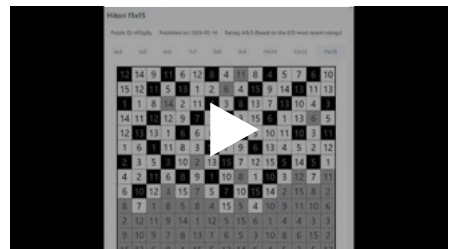
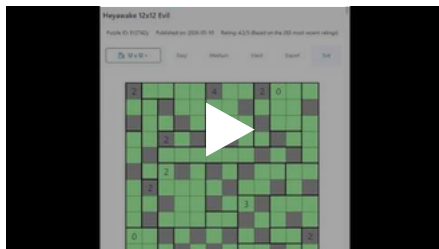
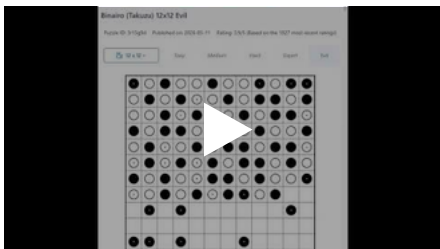
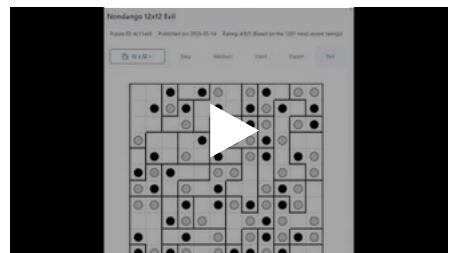
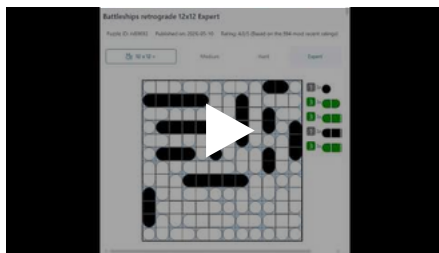
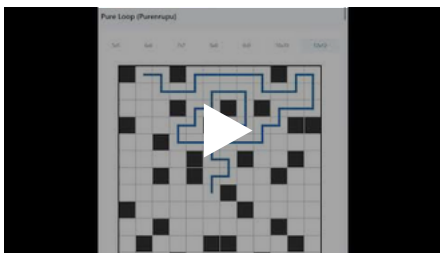
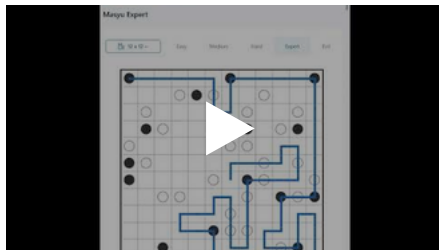
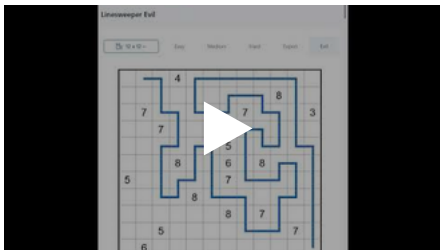
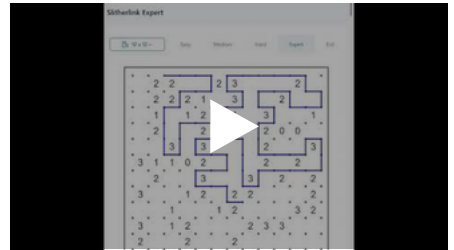
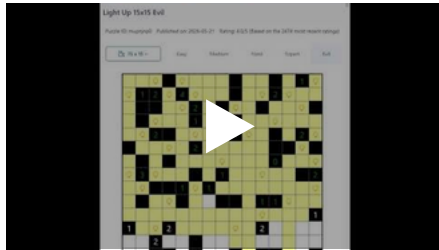
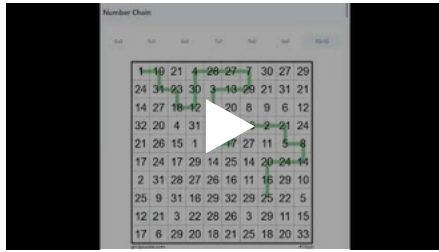
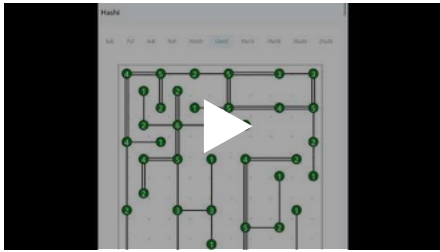
Collection of automated solvers for over 100 types of logic puzzles. Each solver models the puzzle rules as mathematical constraints, solved by Z3 SMT Solver or OR-Tools CP-SAT. Puzzles are automatically scraped from websites via Playwright (with OCR Pytesseract if needed), solved, then the solution is played step by step. A GUI (Tkinter) provides live solving visualization. Supported puzzles include: Sudoku, Nonogram, Binairo, Hitori, Nurikabe, Slitherlink, Kakuro, Masyu, Tents, and many more.

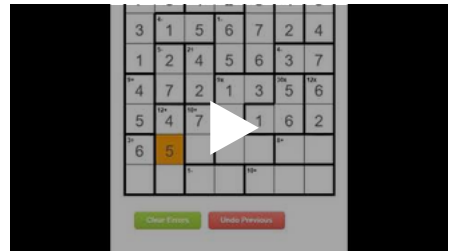
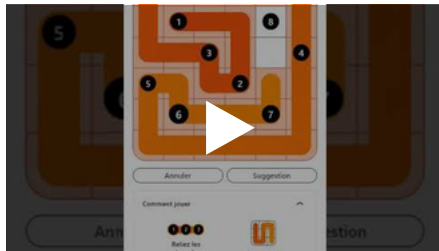
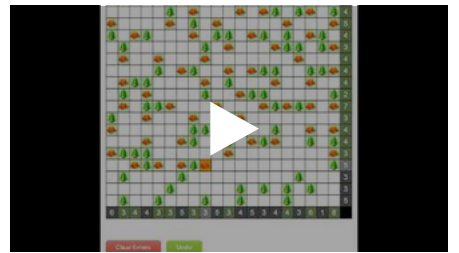
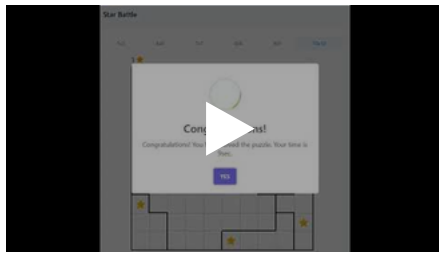
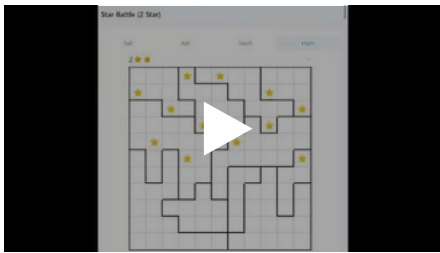
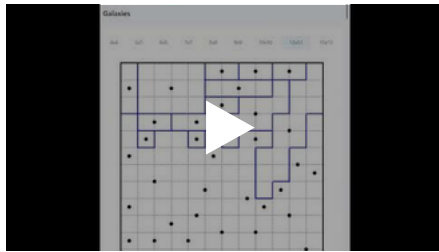
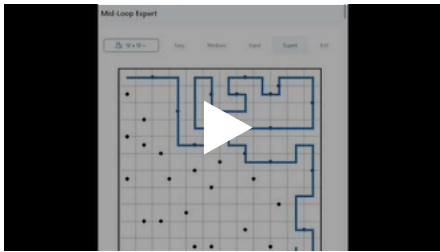
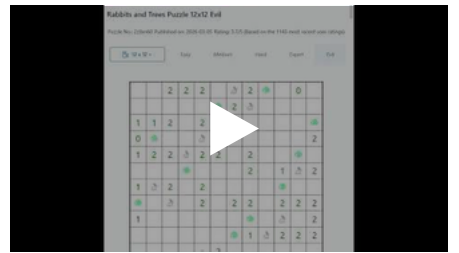
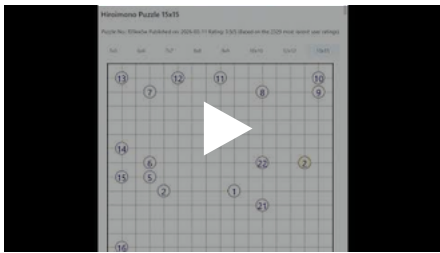
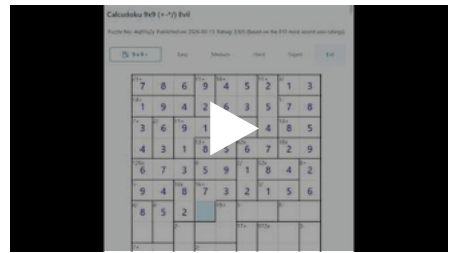
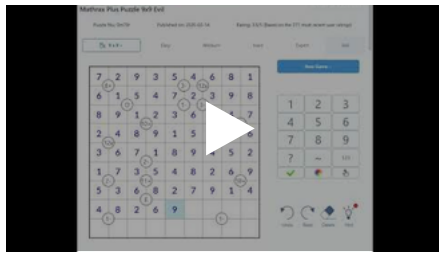
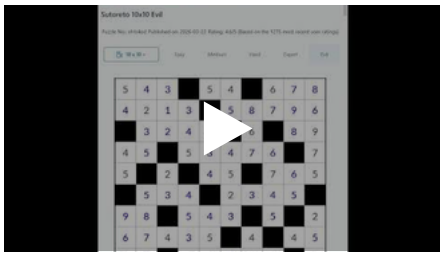
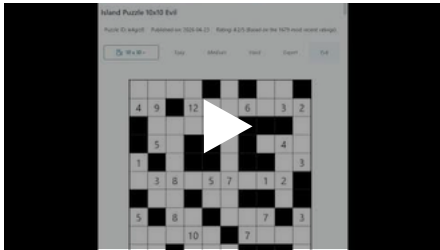
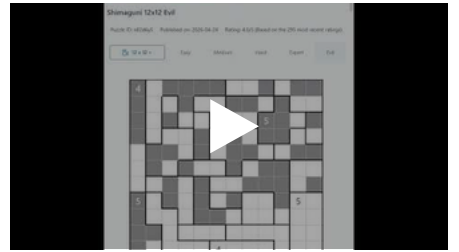
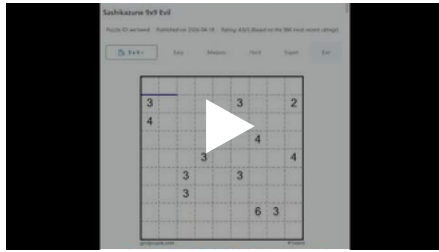
Python 3.12 Z3 OR-Tools (CP-SAT) Playwright Pytesseract

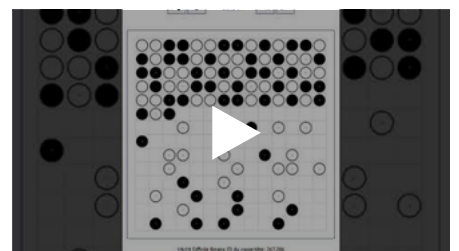
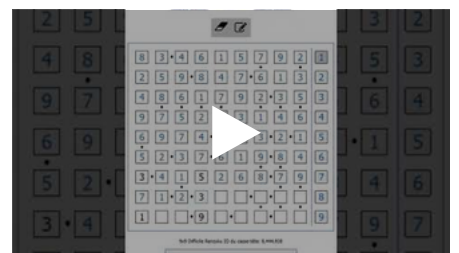
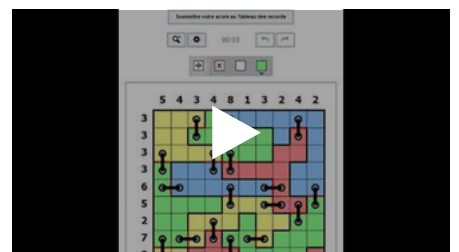
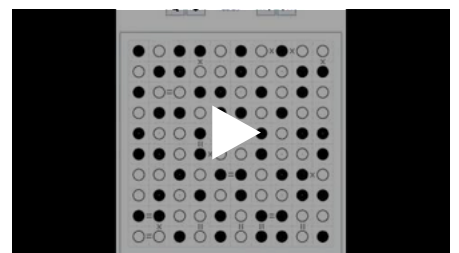
[GitHub](#)

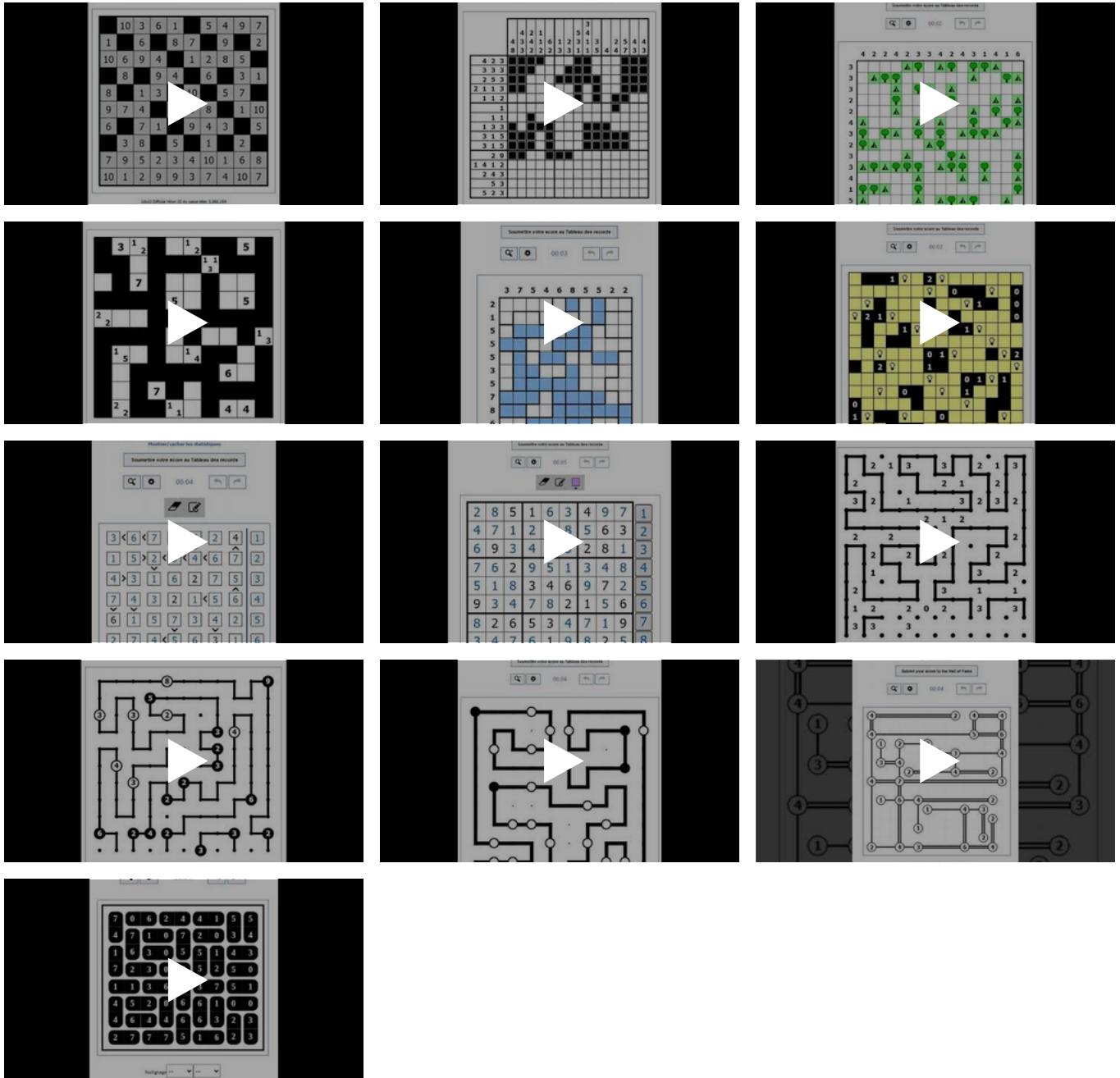
Videos

Solving examples in real time (non-exhaustive list) - the solvers adapt to all difficulty levels and grid sizes.









vuille.fr

2026

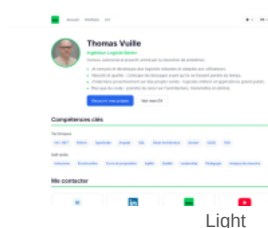
Bilingual personal site (FR/EN): introduction, resume and project portfolio. Astro static generation, light/dark/contrast themes, deployed on GitLab Pages.

Personal portfolio site built with Astro 7. A single scrollable page combines introduction, key skills, portfolio and resume. Project cards expand inline with external links and technology badges. French/English internationalization, theme switcher (light, dark, contrast). Unit tests (Vitest), e2e tests (Playwright) and link checking in CI. Automatic deployment to GitLab Pages on every push to main.

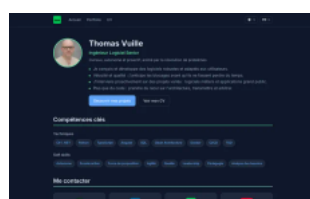
[Astro 7](#) [TypeScript](#) [Vitest](#) [Playwright](#) [GitLab CI/CD](#) [ESLint](#)

Production application

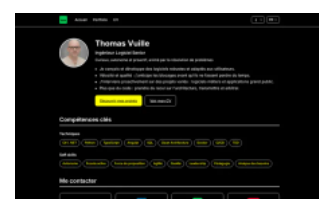
Screenshots



Light



Dark



High contrast

Qwirkle Web

2022

Web port of the Qwirkle board game. Real-time multiplayer application with SignalR.

[ASP.NET 6](#) [Blazor WebAssembly](#) [SignalR](#)

[Demo](#)

dobble.fr (Spot It!)

2020 - present

Web port of the Dobble (Spot It!) card game: real-time multiplayer, card generation via finite projective plane.

This project is a web adaptation of the Dobble (Spot It!) card game, hosted at [dobble.fr](#). Players compete in real time to be the first to spot the shared symbol between their card and the center card.

Cards are generated on the fly using a finite projective plane: each card has n symbols, and any two cards share exactly one common symbol.

Initial version developed in 2020. Ongoing rewrite: migrating from a monolithic MVC architecture (jQuery) to a Vue.js SPA and REST API, with modernized infrastructure (multi-arch Docker, Traefik).

Original stack

[C#](#) [ASP.NET Core MVC](#) [Razor Views](#) [JavaScript](#) [jQuery](#) [Ajax](#) [SignalR](#) [Bootstrap](#) [Serilog](#) [Docker](#)

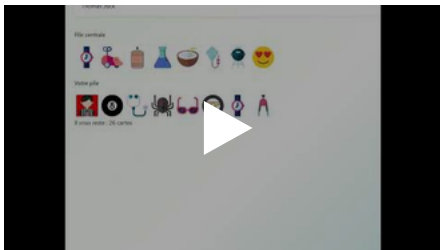
Ongoing rewrite with the following tech stack:

[.NET 10](#) [Vue.js 3](#) [TypeScript](#) [Vite](#) [SignalR](#) [Docker](#) [Traefik](#) [Raspberry Pi 5](#)

[Production application](#)

[GitHub](#)

Videos



chromino.fr

2020 - present

Web adaptation of the Chromino board game: faithful gameplay, accessible online without installation and usable on any device.

This project is a web adaptation of the Chromino board game, aiming to deliver a faithful gaming experience accessible online without installation and usable on any device.

Born from a personal initiative, it reflects a full web application design approach, with a focus on performance, accessibility, and real-time interactivity.

Initial version developed in 2020. Ongoing rewrite with .NET 10 and Vue.js to modernize the architecture and improve the user experience.

Technologies used

[C#](#) [ASP.NET Core 3.1](#) [EF Core \(Code First\)](#) [Identity](#) [JavaScript](#) [jQuery](#) [Ajax](#) [SignalR](#) [Visual Studio 2019](#)
[Git/GitHub](#) [Trello](#)

Infrastructure

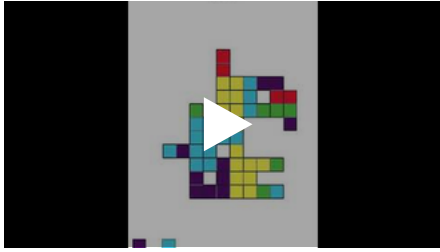
[Ubuntu Linux \(OVH\)](#) [Apache](#) [MS SQL Express](#)

Ongoing rewrite with the following tech stack:

[.NET 10](#) [Vue.js](#) [SignalR](#) [EF Core](#) [Docker](#) [Raspberry Pi 5](#)

[Production application](#)

Videos



FoodTruckLyon.fr
Food truck locator website in Lyon. Final C# training project.

2018 - 2019

C#

ASP.NET MVC

SQL Server

jQuery

Skills

Languages & Frameworks

- C#
- .NET
- ASP.NET
- Python
- TypeScript
- JavaScript
- Angular
- Vue.js
- WPF / XAML
- Blazor
- EF Core
- SignalR
- Go
- Astro
- Java

Methods & Tools

- Agilité
- SOLID
- Clean Architecture
- TDD
- DDD
- Docker
- Kubernetes
- Microservices
- SonarQube
- Playwright
- Selenium
- RabbitMQ

Databases

- SQL Server
- PostgreSQL
- Oracle SQL
- MySQL / MariaDB
- SQLite
- MongoDB
- Redis
- Elasticsearch

IDE & Tools

- Rider
- Visual Studio
- PyCharm
- WebStorm
- VS Code
- GitHub Copilot
- Vitest
- Stryker
- Trello

AI & Assistants

- Claude Code
- OpenCode
- Codex
- ZCode
- Kimi Code
- Antigravity

DevOps & Homelab

- GitLab CI/CD
- GitHub Actions
- Keycloak
- Auth0
- Terraform
- Ansible
- Nginx
- Apache
- Traefik
- Portainer
- Prometheus / Grafana
- Uptime Kuma
- Umami
- Fail2ban
- WireGuard / Tailscale
- Nextcloud
- Immich