Mathieu Limonier, Programmer - Trainer

job@limonier.be **|** Silly and surroundings, Hainaut **|** https://www.limonier.be **|** Mastodon **|** RSS **|** RSS

| SUMMARY | I love sharing my passion for IT and development, and especially making it as accessible as possible. I prefer an application to do one thing but do it well! I maintain a humble website where I provide simple and visual documentation on Open Software. |

SKILLS

.Net Development, ASP.NET Development: C#, Razor, Blazor, Mudblazor, Wpf, .Net MAUI (beginner), .net framework 4.7, REST APIs, Minimal APIs, Controllers, Middleware, Authentification, Authorization, MediatR, Polly, Refit, Swashbuckle

General Development: Git, Subversion, CI-CD, Docker, Data structure, Clean code, SOLID, DRY, KISS, YAGNI, Microservices, MVC, MVVM, Dependency Injection, Logging, SignalR, Open Telemetry

Systems: Bash, Sh, Makefile, Powershell

Data Development: Design, Sql syntax, Relational, NoSQL, Entity Framework, Dapper, LINQ

Testing Development: Unit Testing, Integretion Testing, Snapshot Testing, Mocking, xUnit, Bogus, Fluent Assertion, NSubstitute, Verify, c-unit

Other languages - frameworks: C, C++, VHDL, Html5, Css, Markdown, Json, Xml, G, Arduino, Inno setup

Project Management: Kanban, Scrum, Ticketing, Gantt Chart, Waterfall Model, Agile

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EXPERIENCE

Software Designer - *Automatic Systems*   2020-01-01 - Present
https://www.automatic-systems.com/

I handle the integration of external devices into our gates in our external communication and door management application.

- Created a communication/command application between devices and an access authorization service (embedded in internally built gates).
- Created a maintenance application for the company's produced doors.
- Created a door management application.
- Created a comparison application for content from two stock management applications.
- Application to retrieve log files from embedded electronic boards.
- One-click installer for applications.
- Device simulator (readers, printer, screen, etc.).
- Communication simulator (AEA, SITA, etc.).

Developer/Data integrator - *Bureau Van Dijk*   2018-05-01 - 2019-12-01
https://www.bvdim.com/

I analyzed, structured, and improved datasets to transform them into a specific internal database format.

- Integrated data from a dozen countries into the internal database.
- Documented the internal application used to easily format data into the internal database.

Developer - *Infrabel - Information & Communication Technology*   2018-02-01 - 2018-05-01
https://infrabel.be/

I was hired to migrate beacon-to-locomotive transmissions (TBL) to the European Train Control System (ETCS). I eventually worked on train station arrival displays.

Analyste développeur - *S.D.T. International*   2013-08-01 - 2017-02-01
https://sdtultrasound.com/

I was responsible for maintaining and improving the embedded program in a device that listens to ultrasounds.

- Maintenance of embedded program (Embedded C).
- Redesign of graphical interface (UI - Business separation).
- Implementation of unit tests.
- Implementation of an embedded debugging server.
- Code cleanup.
- Graphical application for battery load testing.
- Administration of a Kanban application.
- Demonstration application for the new firmware version (Embedded C++).

Stagiaire - *I.E.M.N.*   2013-08-01 - 2013-02-01
https://www.iemn.fr/

I automated a high-frequency microscope. The microscope was composed of two motorized tables with three movement axes (up/down, left/right, forward/backward), a control/data acquisition computer, and a high-frequency network analyzer (PNA-X Microwave Network Analyzer).

- Automated microscope movement (via joystick, multi-millimeter jumps).
- Simplified microscope operations (initialization, approaching the element to measure).
- Simplified microscope use (automatic scanning, calibration).
- Taught C and Arduino in Bachelor's first year.
- Laboratory data acquisition and visualization.

PROJECTS

Personal server
Installation and management of a personal micro-server   2025-01-01

- Automated management
- Managed a free file hosting and collaborative work platform (Nextcloud).
- Managed multiple multimedia applications.
- Managed a software forge (Gitea, Jenkins).
- Managed a free video communication app (Jitsi Meet).
- Managed a free read-later app (Wallabag).
- Managed a feed aggregator (FreshRSS).

Static website (blog)
Creation, installation, and management of a static website with Easy IT help articles.   2025-06-20

- Website as lightweight and eco-friendly as possible
- As simple as possible to use
- As simple as possible to create content
- Using Hugo

Home automation
Use and configuration of a free home automation program   2025-01-01

- Functional Zigbee network throughout my house
- Automation of complex actions
- Unified music management

Simplified Raspberry Pi OS with GNOME.

Creation, installation, and usage of a Debian/Ubuntu-based Linux distribution with the motto 'One application, one function'. 2025-01-01

- Automated installation
- Application testing
- Ensured interface consistency over time
- Application configuration
- Application documentation
- Tutorials for application use

VOLUNTEERING

Les Scouts - Animateur 2005-01-01 - 2009-01-01
https://lesscouts.be/
Chef louveteaux (Bagheera).

Non-profit organization - Treasurer Treasurer of ASBL CEI. 2009-06-01 - 2011-06-01

Student association - President President of a student group (C.E.I.). 2012-06-01 - 2013-06-01

Student organization - President President of my higher education school's student council. 2011-09-01 - 2012-09-01

Noobeek - Membre I help with the creation, organization, and hosting of offline LAN parties (friendly gatherings to play networked games without internet). 2010-01-01 - Present

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EDUCATION

Evoliris 2017-03-01 - 2017-08-31
Training - Android application development

Evoliris 2017-09-01 - 2018-02-01
Training - Cyber Defense and anti-intrusion

École Supérieur en Informatique (E.S.I.) 2009-09-01 - 2013-07-01
Bachelor - Informatique industriel

- Algorithms
- Java
- Assembler
- Statistics
- Microcontroller
- Project Management
- Computer Architecture
- C
- Mathematics
- Physics
- Programmable Logic Controller
- Operating Systems
- C++
- Databases
- Electronics
- Data Acquisition, Visualization, and Analysis

LANGUAGES French *(Native language)* , English *(Spoken : A1, Other: B1)* , Dutch *(A1)*

INTERESTS *Software* [free software , home assistant , yunohost , Raspberry Pi] , *Games* [video games , playing on Linux , board games , role-playing games] , *Reading* [bande dessinée , saga books , science fiction , fantasy] , *DIY* [woodworking , furniture upcycling , 3D printing] , *Ecology* [digital ecology , vegetable garden , recycling] , *Model making* [metal , plastic , wood , scene creation , train]