

My Experience with HUGO: Open-source static site generator

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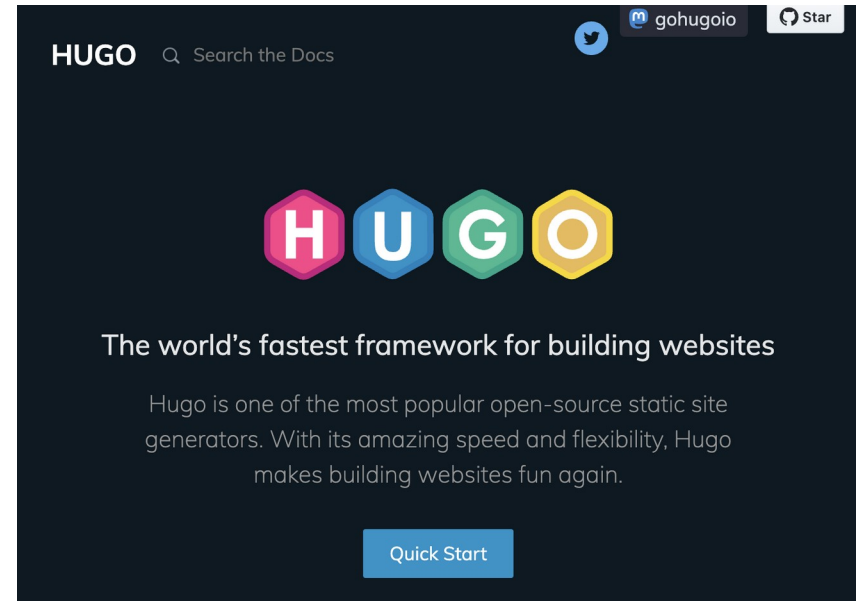
*15th Journées Informatique IN2P3/IRFU,
23 – 26 September, 2024
Les Balcons du Mont-Blanc*

Motivation: Why ?

- My first Web sites (Master Courses), ~ 2005, were based based on HTML & CSS sheets (copied from my colleagues)
- Content Management System (CMS) tools:
 - Drupal (in the context of large projects: ROOT, ALICE): since ~ 2008
 - Wordpress (in the context of local projects – Geant4 course for Doctoral School): since ~2013
 - Issues with CMS
 - Using of wysiwyg editor is resulting in a complex HTML output with mixed content and formatting; differences in the editor and final output
 - Drupal upgrades requiring site content adjustment
 - Making site copies (for previous years courses) not straightforward – dangling links
- Static site generators:
 - Jekyll – created in 2008 (used by ROOT since 2020, Geant4 since 2022)
 - HUGO – created in 2013 (my choice in 2019)

My Choice: HUGO

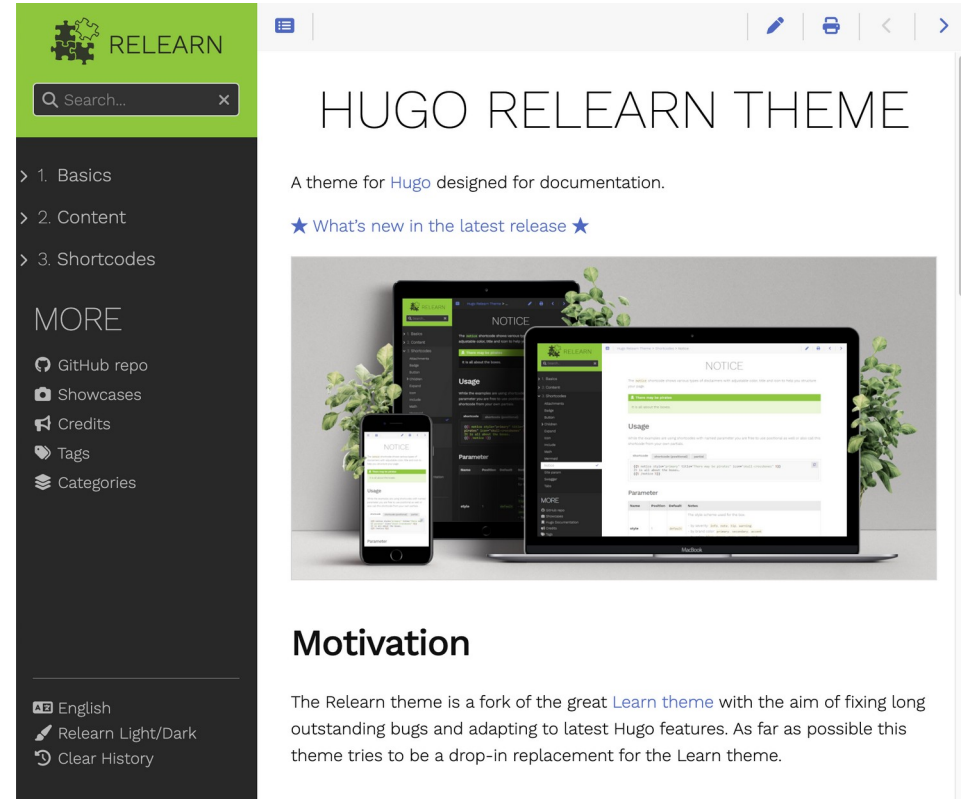
- A fast and flexible static site generator
- Developed in Go, since 2013
- By Bjørn Erik Pedersen ([bep](#)), Steve Francia ([spf13](#))
- Easy to install & use
- Content of the Web site in text files in the 'content' directory
 - **Markdown, [Mark, HTML, ...]**
- Large number of themes
 - **Classified according to type (blog, docs, ...)**
- Web site generation is almost instantaneous
- Multitude of features integrated by default
 - **Menus, sitemap, multilingual management**



gohugo.io

My HUGO Knowhow

- Installation macOS via brew
- Choosing a Theme:
 - Started with **Learn**, which support has stopped in favor of **Relearn**
- Following the Relearn theme documentation step by step to define a site
- Manual import of site content
 - Copy/paste of web pages content
- Github/Gitlab deployment
 - Following the HUGO documentation pages “Host on GitHub/GitLab Pages”



HUGO RELEARN THEME

A theme for [Hugo](#) designed for documentation.

★ What's new in the latest release ★

Motivation

The Relearn theme is a fork of the great [Learn theme](#) with the aim of fixing long outstanding bugs and adapting to latest Hugo features. As far as possible this theme tries to be a drop-in replacement for the Learn theme.

mcselby.github.io/hugo-theme-relearn

My HUGO Projects

VMC
Simulation Framework

Search...

- Download
- Installation
- User Guide
- Examples
- Reference
- Publications
- Support

MORE

- vmc-project on Github
- © Copyright
- Credits

VMC PROJECT

Virtual Monte Carlo (VMC) defines an abstract layer between a detector simulation user code (MC application) and the Monte Carlo transport code (MC). In this way the user code is independent of any specific MC and can be used with different transport codes within the same simulation application.

GEANT4 IN2P3 AND PHENIICS SCHOOL

27 - 31 May 2024, IJCLab

The 2024 tutorial is supported and organised by the Doctoral School PHENIICS.

Registration

The registration for the PHENIICS participants:
<https://adum.fr/script/catalogue.pl?mod=3581561&site=psaclay>

The application for registration for the CNRS and external participants:
<https://adum.fr/script/catalogue.pl?mod=3581526&site=psaclay>

Program

- Presentations
- Installation
- Past Sessions

MORE

- Geant4
- Geant4 Application Developers Guide
- Past Sessions (before 2022)
- Location
- Campus Map

Built from Grav and Hugo

COURSE DATA PROCESSING

Master-1: Nuclear Energy

2023 - 2024

Courses

- Intro
- Understand
- Learn
- Program in the
- Allow their

Program

- Presentations
- Project
- Past sessions

MORE

- Location
- Campus Map
- Online C++ Compiler (Programiz)

Built from Grav and Hugo

OBJECT-ORIENTED C++ COURSE

27 March 2024, IJCLab

This session is proposed for the Doctoral School PHENIICS, see also the university Web sites:
<https://adum.fr/script/catalogue.pl?mod=3581526&site=psaclay>

Registration - CLOSED

The registration for the PHENIICS participants is organised by the doctoral school

The application for registration for the external participants (deadline 8 March 2024):
<https://indico.ijclab.in2p3.fr/event/10290/timetable/?view=standard>

Home

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- GitLab
- ROOT
- ROOT Reference

BACKUP SLIDE

HUGO

vs.

Jekyll

- gohugo.io
 - Developed in Go (compiled language)
 - Prebuilt binary distributions or system installer
 - Content: Markdown, Html
 - Extra directory 'content'
 - Front Matter: TOML, YAML, et JSON
 - Large number of themes (~1000)
 - Classified according to "tags" (Blog, Docs, Minimal, ...) on the Hugo site
 - Server updates the site automatically with the local changes
 - Both: Integration with GitHub/GitLab pages
 - Faster than Jekyll, but this counts mainly when building sites with hundreds/thousands pages (see eg. these [benchmarking results 2024](#))
- <https://jekyllrb.com/>
 - Developed in Ruby (interpreted language)
 - Requires recent installation of Ruby
 - Content: Markdown, [Html?]
 - Content pages in the top directory
 - Front Matter: YAML
 - Large number of themes (1,868 public repositories in GitHub)
 - No classification on the Jekyll site
 - Server launched after local changes