Tutorial: Build your own website

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IEOR GSG: Lunch & Learn Seminar

Why a website?

- It is your personal brand,
- A website **showcases** your work,
- It generates attention for your research,
- It looks **professional**,
- It may attract the attention of future collaborators, employers, etc,
- It can serve as your **blog** to disseminate your thoughts and ideas,
- It enables you to **easily share** information about yourself.

What is a good website?

- It is easy to find,
- It looks **good**,
- It works well on mobile devices,
- It is **up-to-date**,
- It is **easy** to **setup**,
- It is **easy** to **maintain / update**.

Today's goal

Leave with a functioning personal website with:

- Your photo,
- 1 line bio,
- 1 uploaded publication

Enter Hugo



Why Hugo?

- Very fast
- Easy to edit with Markdown files
- Responsive design
- Support for themes & extensions
- Can be hosted for free on Github Pages

Academic Theme



- Made for academic personal websites
- Supports math syntax & code highlighting
- Built-in support for publication (formatting)
- Extendible with widgets
- Popular & actively maintained

Built-in widgets

- About/biography
- Recent & selected publications
- Recent news/blog posts
- Projects
- Talks
- Contact
- Hero (introduction banner)
- Featurette (show features)
- Custom widget (add your own content!)

Here we go!

Download & Install Git / Github Desktop

Comfortable with Git?

- Install Git https://git-scm.com
- Want to learn Git? Checkout this tutorial.

Not so comfortable with Git?

• Install Github Desktop - https://desktop.github.com/.

Fork my Academic-Kickstart repo

- Log-in / create a Github account (free) if you don't have one.
- Go to https://github.com/quic0/academic-kickstart. Note: Use this version since I made some changes.
- Click Fork to create your own copy.
- For the forked repository, click on settings.
- Change repository name to website.
- Create a local copy of the website with the following commands (or use Github Desktop):

```
git clone CLONE_LINK_HERE my_website
cd my_website
git submodule update --init --recursive
```

Setting up repositories

We will use two repositories:

website (public)

Here we store all Hugo files. This is the repository you will edit. **We made this one already**.

\$USER.github.io (public)

Here we store the compiled website. We will set it up for automatic updates. Replace \$USER with your github username. **Make this public repository now**.

Download & Install Hugo

MacOS

- Download and install HomeBrew. It's a great tool.
- Install Hugo from the terminal with brew install hugo.

Windows

- Open PowerShell with administrative privilages (right-click, run as administrator).
- Install the Chocolately package manager with the following command: Set-ExecutionPolicy Bypass -Scope Process -Force; iex ((New-Object System.Net.WebClient).DownloadString('https://chocolatey.org/install.ps1')).
- Install Hugo with choco install hugo -confirm.

Linux

- If you have the latest Ubuntu verison, use snap install hugo or use aptget install hugo.
- Otherwise download Hugo binary from GitHub.
- Place the binary in your path.

Viewing your website locally

• View your new website by running the following command:

hugo server

- Now visit http://localhost:1313 and your new Academic powered website will appear.
- Your local version will update automatically with changes!

Structure of the website

A Hugo website typically has the following folder/files:

- config.toml Configuration file for the website.
- content/ Folder for all website pages.
- public/- Folder with the compiled version of the website.
- static/ Folder for static objects.
 - Files go to static/files/
 - Images go to static/img/
- themes/ Folder for the website theme(s).

Editing the config file config.toml

• Change the baseurl to

```
https://$USER.github.io/
```

Replace \$USER with your Github username.

- Edit your name and role on lines 53 & 54.
- Change line 58 to

```
organizations = [{name = "UC Berkeley", url = "http://ieor.berkeley.edu/"}]
```

• Edit your contact information on lines 62-67.

Notice the changes to your website!

Commit the changes

Git

- Review changes with git status
- Add changes with git add
- Commit with git commit
- Push to GitHub with git push

Github Desktop

- Add summary
- Click commit to master
- Click Push to origin (GitHub)

Setup deploy script

We will use https://travis-ci.org/ for automatic deployment of our website.

First we need a GitHub personal token:

- Go to your GitHub account settings.
- Click on Developer Settings -> Personal access tokens -> Generate new token and enter your password.
- Under token subscription enter Travis CI Website and select scope public_repo. Click generate token.
- **Copy the token**. You will need it in the next step!

Setup deploy script II

- Go to https://travis-ci.org/ and sync Travis with your GitHub account.
- Click add repository (plus symbol on the left).
- Toggle the switch for the website repository.
- Click on the settings icon for website
- Under environment variables, add a variable with name GITHUB_TOKEN and as value the token you generated. Click add.

Setup deploy script III

- Edit your .travis.yml file by replacing <USER> with your GitHub username.
- Commit and push the change to GitHub!
- Now Travis will automatically publish your website to your \$USER.github.io repository. You can access your website via https://\$USER.github.io.

Structure of a webpage

The pages always have the following format.

```
+++
PREAMBLE - Configuration for the page
+++
BODY - Page content shown on website
```

Editing a webpage

- The website is written in Markdown. Markdown falls somewhere in between plain-text and LaTeX.
- Easy to edit yet powerful.
- Some simple Markdown commands
 - Heading with #, sub-headings with ##, and so forth.
 - *Italic* with *asterisks*.
 - Bold with **asterisks**.
 - Math mode with \$ as in LaTeX.
 - For simple lists use:
 - item 1
 - item 2

Let's edit your bio

- Open the file content/home/about.md. This contains the about page.
- Replace your bio text with:

```
Hello, my name is ..... and I am a PhD student at UC Berkeley, Department of Industrial Engineering and Operations Research.
```

Commit the changes to GitHub.

Add a publication

- From the command line, run hugo new publication/NAME.md where NAME is a short name for your publication. This creates a new file for your publication. **Don't forget the .md extension!**
- Edit title, authors, journal, and abstract.
- Add a link to the pre-print / pdf.
- Commit your changes and push to GitHub. See your website change!

Update your photo

Recall that images go to static/img/.

- Get an photo of yourself.
- Optional: Crop it to 1000 x 1000 pixels with https://imageresize.org/.
- Replace the file static/img/portrait.jpg with a photo of yourself.
- Commit and push!

Custom domain name

- Buy a domain name on Google Domain (or another registrar). About \$10 a year.
- Link it to htpps://\$USER.github.io
- Setup custom domain under \$USER.github.io settings -> GitHub Pages.

Next steps!

Read the Academic docs for help with editing https://sourcethemes.com/academic/docs/

Stuck?

Ask for help / read the docs

Documentation

- Academic theme Docs: https://sourcethemes.com/academic/docs/
- **Hugo** Quickstart: https://gohugo.io/getting-started/quick-start/
- **Hugo** Docs: https://gohugo.io/documentation/
- **Hugo** Themes: https://themes.gohugo.io/

Questions?

Slideshow created using Remark JS.