



Harvard John A. Paulson
School of Engineering
and Applied Sciences

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Authoring the OpenScholar Harvard Architecture, Circuits and Compilers Website

SEAS Office of Computing

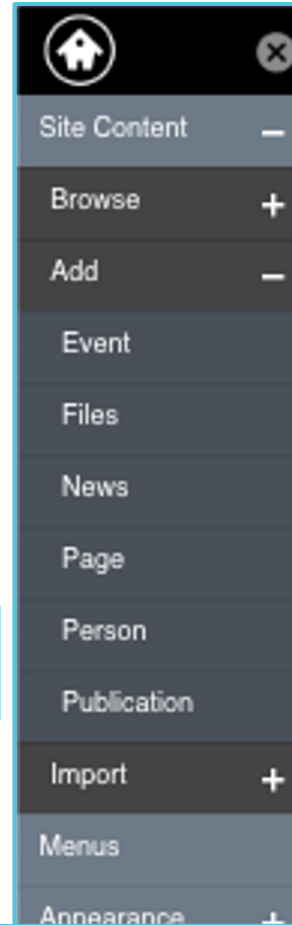
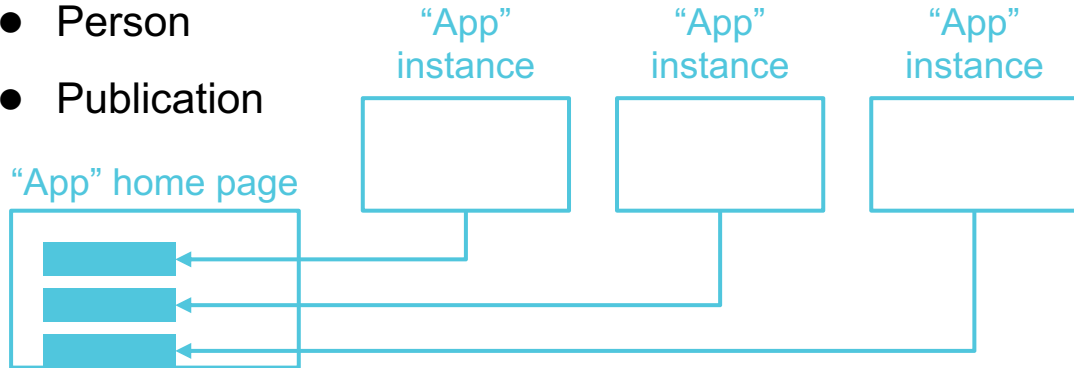
Today's topics

- OpenScholar model
- Digital content best practices
- OpenScholar publications



Content types

- (Calendar) Event
- News
- Page
- Person
- Publication



Nomenclature

- Naming criteria
- Benefits
 - Search
 - Context
 - Grouping
 - Downloading

img-chip-dnn.png

img-people-hsiao_0.png

img-people-hsiao.png

img-software-nvmexplorer.png

img-home-background.png

img-slideshow-news_events.png

img-slideshow-chip_gallery_0.png

img-slideshow-chip_gallery.png

img-slideshow-research_0.png



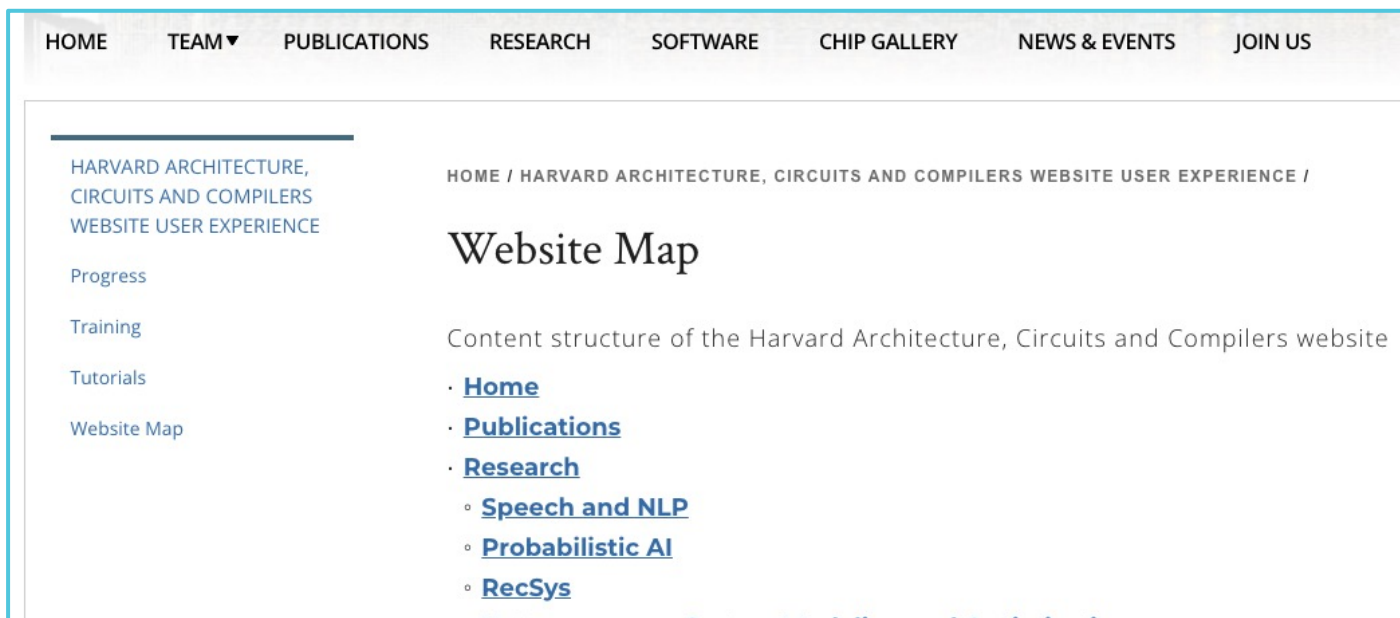
Maintenance

- Upon editing content
 - Remove unused assets
 - Update links to the website or external content
- Periodically
 - Keep information up to date



Information architecture

<https://vlsiarch.eecs.harvard.edu/ux>



The screenshot shows a website navigation menu with the following items: HOME, TEAM (with a dropdown arrow), PUBLICATIONS, RESEARCH, SOFTWARE, CHIP GALLERY, NEWS & EVENTS, and JOIN US. Below the menu, the page title is "HARVARD ARCHITECTURE, CIRCUITS AND COMPILERS WEBSITE USER EXPERIENCE". The main content area is titled "Website Map" and includes the text "Content structure of the Harvard Architecture, Circuits and Compilers website". A list of navigation links is provided: Home, Publications, Research, Speech and NLP, Probabilistic AI, and RecSys. The left sidebar contains a list of navigation items: Progress, Training, Tutorials, and Website Map.



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Information architecture

<https://vlsiarch.eecs.harvard.edu/ux>

Tutorials

Tutorial - Publications

Website Map

website.

Creating publications

1. Add new publication
 - A. Admin panel - Site Content / Add / Publication
 - B. Publications "home" page - Add New Publication
2. Create Publication interface
 - A. Add publication content
 - B. Select category
 - C. Save

Publications display

Publications page

Home page

Research page

Categories

Site Content/ AddPublication

Add publication information

0:00 / 3:54

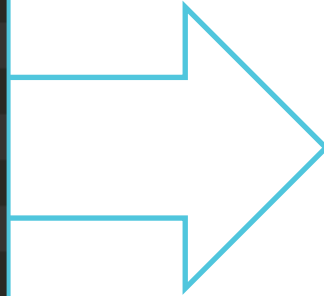
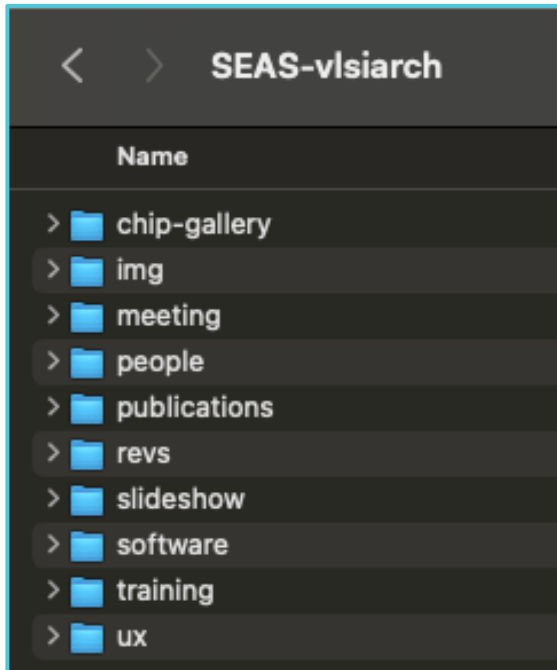
Learn more about

- [Creating publications](#)



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Storage



Google Drive



OneDrive



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OpenScholar publications

Publications

- Publications are *Publication* native OpenScholar elements
- The Publications “home” page lists all publications
- “*list of posts*” widgets can list categorized publications on other pages, like the Home page and research pages

Publications page

Home page

Research page

The image displays three screenshots of the Harvard Architecture, Circuits and Compilers website, illustrating the layout and content of different pages.

- Publications page:** Shows a list of publications under the heading "Publications". The list includes titles, authors, and dates. For example, "RecNet: user data processing for solid state drive based recommendation inference" is listed with authors Yu-Shun Heiss, Siva Kumar Sanyal, Han, Michal Filizola, Timothy Tan, Michael B. Sullivan, Vijay Janapa Reddi, Vasi Srinani, and Steven W. Keener, dated 2022.02.02. Other publications listed include "WordExpander: A Framework for Cross-Stack Compensations of Embedded Non-Volatile Memories" and "Zohar Vitan, Razel Anwar, Abdulrahman Mahmoud, Tariq Za, Yu-Shun Heiss, Vijay Janapa Reddi, and Inel Brodatcu, 2022.02.02. 'Risk-Resistant Built-in-Test for Federated Reinforcement Learning-based Navigation Systems'".
- Home page:** Features a "News & Events" section with a "RecNet: user data processing for solid state drive based recommendation inference" article. Below this is a "Welcome to the Harvard Architecture, Circuits, and Compilers Group!" message. The page also includes sections for "RECENT PUBLICATIONS", "UPCOMING EVENTS", and "RECENT NEWS".
- Research page:** Titled "Speech and NLP", it features a diagram of a neural network architecture. The diagram shows a sequence of layers: "Input" (with "Word embeddings" and "Embedding matrix"), "Hidden" (with "Attention" and "Feedforward"), and "Output" (with "Softmax"). The diagram is annotated with "RecNet" and "RecNet-2". Below the diagram is a text box: "We explore efficient combinations of natural language processing (NLP) and speech recognition applications from software and hardware perspectives. Software solutions generally include optimizations on neural network (NN) structures and computations on model parameters. As for hardware acceleration, we exploit specialized datapaths, controller and memory systems to maximize massively parallel computations of NNs, while also exploring low-precision and unrolled datapaths and unrolling."

Publications display

Site Content/
Add/Publication

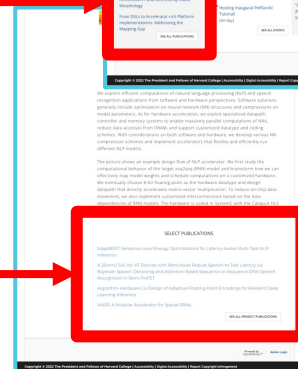
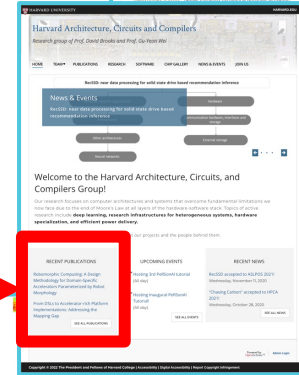
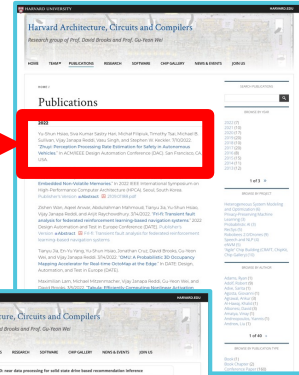
Add publication
information

Categorization

Publications page

Home page

Research
page



Creating publications demonstration

1. Add new publication
 - A. Admin panel - Site Content / Add / Publication
 - B. Publications “home” page - Add New Publication
2. *Create Publication* interface
 1. Add publication content
 2. Select category
 3. Save

The screenshot shows a 'Create Publication' form with the following sections:

- Type:** A dropdown menu set to 'Source Article'.
- Title:** A text input field.
- YEAR OF PUBLICATION:** Radio buttons for 'Submitted', 'In Preparation', and 'Working Paper'. Below are 'Year', 'Month', and 'Day' dropdowns. A note states: 'Permitted date formats: 2/10/2022, 2/2022, 2022'.
- Author / Editor:** A text input field with an 'Add person' button.
- Journal:** A text input field.
- Volume, Issue, Pages:** Three text input fields. An example shows 'Volume number' as '1' and 'Issue number' as '1', with 'Pages' as '1-23-25'.
- Article URL:** A text input field with a 'Link text' dropdown.
- Link creation directly via:** A text input field.
- Abstract:** A rich text editor with various formatting options.
- Attach files:** A dashed box with an 'Upload' button and the text 'Drag your files here'.
- PUBLICATION DETAILS:** 'Save' and 'Cancel' buttons at the bottom.





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