

Drupal Al

practical ai integration for content workflows

Session Description

In this training, you'll learn foundational AI concepts within a Drupal context, how to install and configure DrupalAI for real-world applications, and build editorial automations using prompt-based workflows. Explore responsible AI practices—including accessibility, bias, and transparency—and optionally collaborate on a live team hackathon project.

August 15, 2025 8:30 am - 4:30 pm





Training Objectives

Participants will:

- Understand foundational AI concepts in the context of Drupal.
- Install and configure DrupalAI with real-world use cases.
- Design and build editorial automators using prompts.
- Explore responsible AI practices for accessibility, bias, and transparency.

Schedule

9:00-9:30 AM | Welcome + Intro to AI in Drupal

- How AI is reshaping content workflows
- The DrupalAI vision and roadmap
- Real-world examples and use cases

9:30-10:30 AM | Installing & Configuring DrupalAI

- Core modules: DrupalAI, Automators, provider bridges etc.
- API keys, providers (OpenAI, Claude, etc.) amazee.ai will provide the credits and the vector database.
- Permissions and secure configuration
- Hands-on setup on local or sandbox environments. amazee.ai will provide clean environments with the appropriate keys installed.

10:30-10:45 AM | Break

10:45 AM-12:00 PM | Content + Editorial Use Cases

- CKEditor integration
- Use cases: summarization, metadata generation, SEO, translations
- · Bulk operations and cron-based jobs
- · Hands-on: Build a workflow to simplify and tag articles

12:00-1:00 PM | Lunch

1:00-2:30 PM | Prompts, & Recipes

- Writing reusable, effective prompts Link
- · Automator creation: triggers, outputs, contextualization
- Tips for clarity, safety, and simplicity
- Hands-on: Build "Simplified Text" + "Smart Title" automators Link

2:30-2:45 PM | Break

2:45-3:30 PM | Ethics, Bias, and Accessibility

- Bias and mitigation
- Inclusive AI use in civic and public content
- Accessibility-forward AI use cases
- Group discussion and Q&A

3:30-4:00 PM | Wrap-Up + Next Steps

- Key takeaways
- How to contribute to DrupalAI
- Community resources and opportunities

Session 1 | Welcome + Intro to AI in Drupal

- How AI is reshaping content workflows
- The DrupalAI vision and roadmap
- Real-world examples and use cases

I'm not sure there's been a more exciting time to be involved in Drupal than right now. Drupal is leading the way with AI integration at the core of the CMS, yet ensuring the human element is never lost.



Drupal Al Initiative: Latest Updates and Roadmap

Goals and Vision of the Initiative

The **Drupal AI Initiative** was officially launched in June 2025 with the goal of **democratizing intelligent digital experiences** through Drupal. It aims to channel the creativity of Drupal's **290+ existing AI modules** into a unified, strategic product vision. The vision emphasizes a strong **AI-human partnership** and **responsible innovation**, meaning AI features are designed to **augment** human creators rather than replace them. Drupal's approach focuses on giving organizations powerful AI capabilities **without sacrificing control or freedom** – for example, avoiding vendor lock-in by supporting many AI providers. Ultimately, the initiative envisions Drupal becoming the benchmark for ethical, open-source AI integration, enhancing human creativity and speeding up site-building while maintaining transparency and governance.

Development Progress and Milestones

The initiative has made rapid progress since its launch. It kicked off with over \$100,000 in funding pooled from founding agencies and a dedicated team equivalent to several full-time roles. Key contributors have been meeting almost daily to align on strategy and accelerate development. The work is organized into multiple tracks – for example, Al Core, Al Products, Al Marketing, and Al UX – to tackle different aspects of Drupal's Al capabilities.

The **Drupal AI module** (a central framework for AI in Drupal) saw version 1.1.0 in June and 1.2.0 in July 2025, adding significant features like one-click field-level content generation, suggestions, and an **Agentic** framework for AI-driven agents in Drupal without coding. Early demos showcased AI helping build a marketing campaign in days instead of weeks. Development is coordinated on Drupal.org, and the Drupal Slack #ai channel has around 1,000 participants collaborating.

Leadership and Key Contributors

The initiative is led by a coalition of Drupal experts and agencies:

- Jamie Abrahams (FreelyGive) Al architecture
- Baddý & Christoph Breidert (1xINTERNET) Governance and product direction
- Dominique De Cooman (Dropsolid) Business alignment and fundraising
- Kristen Pol (Salsa Digital) Community engagement
- Dries Buytaert (Drupal Founder) Strategic oversight

These leaders, along with others from agencies like Acquia, form the core team.

Partnerships and Community Collaboration

Backed by top Drupal agencies and the Drupal Association, the initiative integrates with **21+ Al providers** (amazee.ai, OpenAl, Anthropic, AWS Bedrock, Google Vertex Al, etc.) to ensure a provider-agnostic approach. The team is collaborating with the **European Commission** on a responsible Al adoption webinar series, and large organizations like the UN and EC are experimenting with Drupal Al features.

Planned Features and Tools

Planned and emerging tools include:

- Al-assisted content generation (text, images, layouts)
- Automated tagging & classification
- One-click translation/localization
- Semantic Al search & conversational interfaces
- Personalization & A/B optimization
- SEO & accessibility improvements (auto alt-text, AI SEO analysis)
- Al Agent Framework for natural-language site operations with human-in-the-loop controls
- All features will be modular, extensible, and controllable.

Timeline and Roadmap Updates

The roadmap is evolving rapidly, with continuous releases in contrib before potential core integration. A July 2025 community survey is shaping priorities. Expect accelerated delivery through 2025–2026, with regular public updates.

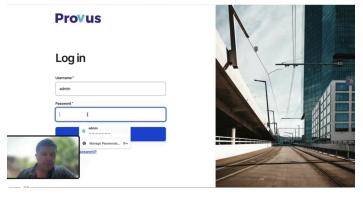
How to Get Involved

- Follow official blogs and press releases on Drupal.org
- Watch recorded webinars (e.g., Welcome to the Drupal AI Initiative)
- Join the Drupal Slack #ai channel
- Contribute to the Drupal Al Initiative project issue queue on <u>Drupal.org</u>

https://www.drupal.org/association/blog/drupal-launches-new-ai-initiative-to-democratize-intelligent-digital-experiences-for-everyone

Resources





https://dri.es/why-drupal-is-built-for-the-ai-era | https://vimeo.com/1107119646?share=copy



https://new.drupal.org/ai

Drupal AI - Practical AI Integration for Content Workflows

Session 2 | Installing & Configuring DrupalAI

Introduction

- <u>amazee.ai</u> has provided a workspace for us and is co-sponsor of this training.
- Core modules: DrupalAI, Automators, provider bridges etc.
- API keys, providers (OpenAI, Claude, etc.) amazee.ai will provide the credits and the vector database.
- Permissions and secure configuration
- Hands-on setup on local or sandbox environments. amazee.ai will provide clean environments with the appropriate keys installed.

No area of Drupal is growing and changing more rapidly than Al!

Setting Up Your Environment

Go to: https://amazee.ai/drupal-ai and get a site set up (it's free). This should take just a few minutes. You will want to choose the "Advance Drupal Skills Edition".

While you're waiting:

Currently, AI in Drupal breaks down into three areas:

- Creating and managing Content
- Creating Media and Alt-text
- Configuring Drupal (at a rudimentary level but that's changing rapidly as we saw in the last session).

The Modules

- Al Core (ai): https://www.drupal.org/project/ai
- Al Agents (ai_agents): https://www.drupal.org/project/ai_agents
- OpenAl Provider (ai_provider_openai):
 https://www.drupal.org/project/ai_provider_openai
- amazee.ai Al Provider (Al credits for this class)
- LiteLLM AI Provider https://www.drupal.org/project/ai_provider_litellm This enables the use of a LiteLLM proxy as a provider for the AI module.

Additional Modules

- Auto Translation: https://www.drupal.org/project/auto_translation
- Al SEO: https://www.drupal.org/project/ai_seo
- Al Image Generator (ai_image): https://www.drupal.org/project/ai_image
- Al Image Alt Text (ai_image_alt_text):
 https://www.drupal.org/project/ai_image_alt_text
- Al Image Bulk Alt Text (ai_image_bulk_alt_text):
 https://www.drupal.org/project/ai_image_bulk_alt_text
- Al Media Image (ai_media_image): https://www.drupal.org/project/ai_media_image

Looking through this (not complete) list demonstrates just how "in flux" Drupal AI is at the moment - it's pretty exciting!

API keys and Providers

As you may know, AI tools are provided by a number of companies. Among the most popular are OpenAI (ChatGPT - https://openai.com/), Claude (https://openai.com/), Google Gemini (https://gemini.google.com/) and Perplexity (https://www.perplexity.ai/)

You need at least one AI provider to use AI in Drupal. Today we're providing three: amazee.ai AI Provider, LiteLLM Ai Provider and OpenAI Provider. Each one have their own capabilities, strengths and weaknesses.

- amazee.ai is providing unlimited number of tokens for our use
- LiteLLM simplifies model access, spend tracking and fallbacks across 100+ LLMs.
- OpenAI is the integration with ChatGPT. Typically you need a paid account to take full advantage of AI in Drupal, amazee.ai is providing that for you today.

Modules to Install

Already installed are: Al Core, Amazee Provider, LiteLLM Provider, OpenAl Provider and Key (where the Al API key is stored).

Let's take a look at what that provides:

Go to: Configuration -> AI -> AI Settings.

We can use Chat, Embeddings, Chat with Image Vision, and Chat with Complex JSON out of the box.

Go to: Configuration -> System -> Keys

When you're working on your own system, this is the first step after enabling the basic modules. You'll add your own key to enable AI to function.

Let's add a lot more:

Go to the Extend menu.

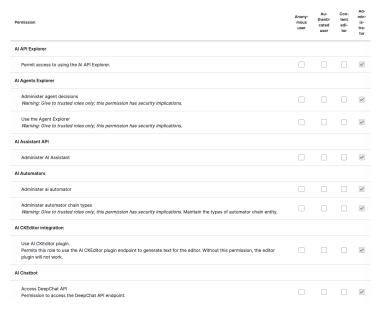
Enable the following modules:

- Al API Explorer
- Al CKEditor Integration
- Al Content Suggestions
- Al Automators
- Al Agents
- Al Agents Explorer
- Al Agents Extra
- Al Chatbot
- Al Image Alt Text

You'll get a warning that AI Agents Extra is an experimental module. Click Continue.

The current providers do not allow for image creation that is available if you were using your own API keys.

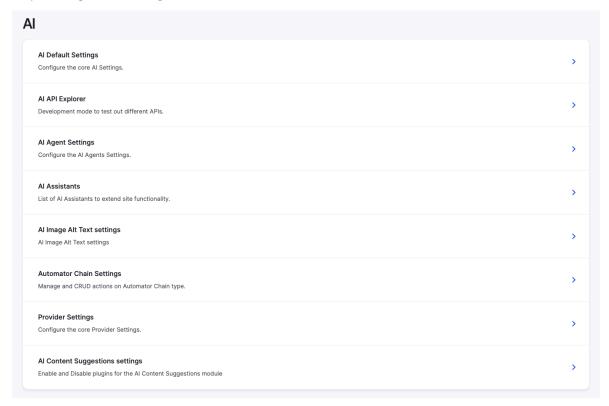
Setting Permissions for Security



Go to: People -> Permissions
"Out of the box" Drupal will only give
the AI related permissions to
Administrators (that makes a lot of
sense!)

However, other roles may need to access some of the features (like AI in CKEditor etc). Your use case will obviously vary, but this is something that must be taken into consideration.

Exploring AI Configurations



AI API Explorer

This is a fun "play zone" where you can test out the enabled features.

Al Agents in Drupal (generated by ChatGPT)

Al agents in Drupal are intelligent software components or integrations that enhance Drupal's functionality by automating tasks, providing intelligent recommendations, and improving user interactions. They can range from chatbots to content automation tools and Al-driven personalization.

Things to Try On Your Own

Setting the tone of your AI generated content

- 1. Set up a Taxonomy vocabulary called "Tone".
- 2. Add Terms: Happy, Sad, Angry, Mine
- 3. In the description for each, describe what that tone would be like.
- **4.** Edit the Basic HTML text format, drag the Al icon to the toolbar and turn on Tone. Select the Tone taxonomy.
- 5. In a node, you can add some text and update the tone.

Auto generating Alt-text for images on upload and bulk upload

1. Update the configuration for AI Image Alt Text at admin/config/ai/ai_image_alt_text (make sure you click autogenerate on upload, but leave the Hide button unchecked)

Summarize PDF's into content (Al Summarize Document)

- 1. Enable the AI: summarize Document module.
- 2. Enable the feature in the AI Tools section of your text format

Chatbot / Al Assistants

- 1. Enable the AI Chatbot, AI Assistant API and the AI Agents modules
- 2. The Al Assistants module is where all the configurations of the chatbot are stored. Behind the scenes, agents perform the tasks you request in the chatbot. The assistant writes the prompt for the agent in the background. The Drupal logs are gathered and re-written in the Assistants and send a summary back to the chat.
- 3. In the future, the AI Agent may actually write a recipe that the Assistant will implement (they're working on that).
- **4.** Another Assistant might interact with a RAG on your site and provide responses based on your own content. The Assistant is where you can configure both Agents and Search.

- **5.** The Chat uses DeepChat (a javascript chatbot). You can have different ChatBots (that are placed in blocks) that can choose a different assistant for a different section of your site.
- **6.** Place the AI DeepChat Chatbot in the footer region in both the front and admin themes
- 7. Experiment by asking the ChatBot "What can you do?"
- **8.** Enter the following prompt:
- 9. Create a taxonomy vocabulary called States and add Terms for each of the 50 states.

Al Automators - allows you to automate the content of a field. They can fill in fields, add images, taxonomy and more.

Al Search - very complex but this will be huge (experimental for now)

Al Swarms - https://youtube.com/watch?v=rUi-Z2QckOM

Session 3 | Content & Editorial Use Cases

- CKEditor integration
- Use cases: content generation, summarization, metadata generation, SEO, translations, content tone and more!
- Hands-on: Build a workflow to simplify and tag articles

Setting up CKEditor!

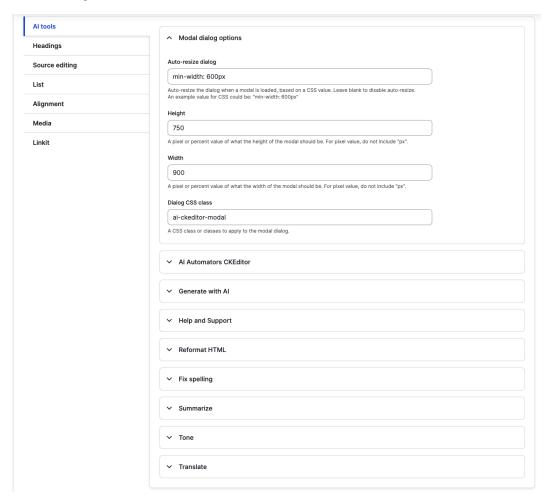
There are a variety of ways you can use AI in Drupal's CKEditor 5. We're going to set it up with a combination of the toolbar tools and sidebar tools that make the most sense to the instructor, but you can pick and choose as you see fit for your workflow!

Go to: Configuration -> Content Authoring -> Text Formats and Editors

1. Click Configure for the Content Format (this differs from Drupal out of the box)



2. Drag the AI icon from the top to the far left position in the toolbar. This will add the AI tools settings below:



- 3. We're going to enable the bulk of these (but not all at this time). Click on Generate with AI and enable it.
- **4.** Add the following in the Completion pre-prompt (it can't be left blank despite what it says): Create the text as prompted.
- 5. Enable the following:

Reformat HTML

Fix Spelling

Summarize

Tone (we'll come back to this one)

6. Click Save

Let's add a couple of options in the side bar.

- 1. Go to Extend and enable Metatag (just the base one)
- 2. Go to Configuration -> AI -> AI Content Suggestions Settings
- 3. Enable:

Evaluate Readability Summarise Text Suggest Title

Let's add a Chatbot to help us with basic site building tasks.

- 1. Go to Configuration -> AI -> AI Assistants and click Add Assistant.
- 2. Enter "Site Building" for the Label.
- 3. Click "Enable Agent Actions". We'll talk more about Agents in the next session.
- 4. Check all the options.
- 5. There are a ton of settings here. Fortunately, the default settings will work just fine.
- 6. Go to Structure -> Block Layout.
- 7. Click on Gin (this is the administration theme we're using).
- 8. Click on Add Block in the Help block region
- 9. Place the AI DeepChat Chatbot
- 10. Change the Title to "Drupal Chat"
- 11. Click Save Block.
- 12. Click on the Drupal Chat bot that appears and ask it "What can you do?"

Let's use the Chatbot to create our Tone taxonomy vocabulary and terms.

- 1. In the prompt type: Create a taxonomy vocabulary called "Tone" and add the following terms: Happy, Sad, Angry and Mine. In the description of Happy, Sad and Angry terms create text that would provide a description of that term for the prompt.
- 2. Within a few seconds, this will be done for you.
- 3. Update the "Mine" term with a description of how you write.
- **4.** Add one for David Attenboro. **In the chat bot**, type: add a term to the Tone vocabulary called David Attenborough. In the Description field put "Rewrite this text in the style of

David Attenborough: calm, thoughtful, and rich with awe and wonder for the natural world. Use elegant, descriptive language and a gentle, documentary-style tone."

- 5. Finally, let's update CKEditor to use our new taxonomy.
 - Go to: Configuration -> Content Authoring -> Text Formats and Editors
 - Click Configure for the Content format.
 - In the AI Tools section, click on Tone and update the taxonomy to "Tone".
 - Check the "Use term description for tone description"
 - Click Save.

Session 4 | Automators, Prompts and Recipes

- Writing reusable, effective prompts Automator creation: triggers, outputs, contextualization
- Tips for clarity, safety, and simplicity
- Hands-on: Build "Simplified Text" + "Smart Title" automators

The following was generated in ChatGPT with the following prompt: I'm creating a class on Drupal AI. Can you provide a good introduction to AI Automators, Prompt engineering and Recipes.

Introduction to AI in Drupal: Automators, Prompt Engineering, and Recipes (ChatGPT)

As Drupal evolves, it's embracing AI not just as a novelty—but as a powerful toolset that helps content creators, site builders, and developers work more efficiently.

Three core concepts you'll encounter in Drupal AI are:

Al Automators

What it is:

Al Automators are tools or workflows in Drupal that automatically apply Al-generated actions to content or fields without manual intervention each time.

Examples in Drupal:

- Auto-generating meta descriptions for nodes.
- Translating content when saved.
- Tagging content with taxonomy terms using Al.

How it works:

Al Automators are often **triggered by actions**—like saving a node, updating a field, or performing a bulk operation. They connect your content to a **predefined prompt** and send it to an Al provider (like OpenAl).

Why it matters:

It streamlines repetitive tasks and ensures consistency across large volumes of content—especially useful for editors managing big sites.

Prompt Engineering

What it is:

Prompt engineering is the practice of crafting **precise**, **effective instructions** (prompts) for AI models so they produce useful, accurate, and context-aware results.

In Drupal terms:

You'll often write or modify prompts for:

- Summarizing content.
- Creating SEO-friendly titles.
- Rewriting content in a specific tone (e.g., formal, friendly, or like David Attenborough).

Good prompts are:

- Clear and specific.
- Context-aware (e.g., using tokens like {{ node.body.value }}).
- Purpose-driven.

Why it matters:

The quality of your AI output depends heavily on your prompt. A vague prompt leads to vague results. A well-engineered prompt produces results you can publish with minimal editing.

Al Recipes

What it is:

Al Recipes in Drupal are **reusable**, **named prompt configurations**. They act like templates that define what the Al should do with your content.

Structure:

Each recipe typically includes:

- A label (e.g., "Summarize Blog Post").
- A **prompt** with tokens (e.g., Summarize this post: {{ node.body.value }}).
- Al settings like model choice and temperature.

How it's used:

- Attached to Automators.
- Accessed manually via the AI sidebar or CKEditor.
- Shared across the site for consistency.

Why it matters:

Recipes let teams **standardize** Al behaviors across the site, reduce guesswork, and ensure quality control in multi-user environments.

Introduction to AI Automators, Prompt Engineering, and Recipes in Drupal (DrupalAI)

Artificial Intelligence (AI) is revolutionizing web development, and Drupal is at the forefront of this transformation. This introduction explores three key concepts in Drupal's AI integration: AI Automators, Prompt Engineering, and Recipes.

Al Automators

Al Automators in Drupal are tools that leverage artificial intelligence to automate various tasks and processes within the content management system. These automators can:

- Generate content based on specific parameters
- Optimize images and media files
- Enhance search functionality
- Personalize user experiences
- Streamline workflow processes

By implementing AI Automators, Drupal developers can significantly reduce manual work and improve overall site performance and user engagement.

Prompt Engineering

Prompt Engineering is the art and science of crafting effective prompts to guide AI models in generating desired outputs. In the context of Drupal, this involves:

- Designing clear and specific instructions for AI tools
- Refining prompts to achieve optimal results
- Understanding the nuances of different AI models

Tailoring prompts to suit various content types and purposes

Mastering prompt engineering enables Drupal developers to harness the full potential of Al-powered features and create more accurate and relevant content.

Recipes

In Drupal's AI ecosystem, Recipes refer to pre-configured sets of instructions or workflows that combine various AI tools and prompts to achieve specific outcomes. Recipes can:

- Automate complex content creation processes
- Implement multi-step AI-driven tasks
- Standardize Al usage across a Drupal site
- Simplify the integration of AI features for non-technical users

By utilizing Recipes, Drupal site builders can easily implement sophisticated Al functionalities without extensive coding knowledge.

Conclusion

Understanding AI Automators, Prompt Engineering, and Recipes is crucial for leveraging AI in Drupal effectively. These concepts form the foundation for creating more intelligent, efficient, and user-friendly Drupal websites in the age of artificial intelligence.

(lesson - don't just take one answer!)

Al Automators - Hands On

Al Automators are tools or workflows in Drupal that automatically apply Al-generated actions to content or fields without manual intervention each time.

Let's create a workflow that automates the process of rewriting our content to a 6th grade level.

The Simplify Text Demo

Required Modules

You need Drupal and the following modules available:

- 1. amazee.ai Al Provider
- 2. Al Search
- 3. Al Core
- **4**. Key
- 5. Search API
- 6. LiteLLM AI Provider
- 7. OpenAl Provider
- 8. Postgres VDB Provider
- 1. Enable Al Automators (done)
 - a. Go to Extend → Filter 'Al Automators' and enable the module.
- 2. Create a Content Type
 - **a.** Go to Structure \rightarrow Content Types.
 - **b.** Click 'Add Content Type'.
 - c. Name it 'Article' → Save and Manage Fields.
- **3.** Add Field: Body
 - **a.** Create a field named 'Body' \rightarrow Text (formatted, long).
 - b. Allowed text formats: 'Content'.

- 4. Add Field: Simplified Title
 - **a.** Create a field named 'Simplified Title' \rightarrow Text (formatted).
 - **b.** Allowed text formats: 'Content'.
 - **c.** Enable Al Automator.
 - **d.** Choose LLM: Text.
 - e. Set Automator Input Mode to 'Base Mode'.
 - f. Automator Base Field: Title.
- **5.** Enter the following Automator Prompt:

https://gist.github.com/jmsaunders/bb6e8669f98bec46415748a5385151c1
Title Prompt

Or copy from here:

Rewrite the following title to a clear, concise version appropriate for a 6th-grade reading level.

Requirements:

- Wrap the output in an <h2> HTML tag.
- Do NOT use a tag under any circumstances.
- Return only the tag and text no explanation, no line breaks, no commentary.

Example of correct output:

<h2>Why Volcanoes Erupt</h2>

Context:		
{{ context }}		

- **6.** Open 'Advanced Settings':
- 7. Choose 'Batch' for status bar, or 'Direct' for instant response.
- 8. Set Al Provider to 'amazee.ai Al'.

- **9.** In Provider Configuration, choose 'claude-3-5-sonnet'.
- **10.** Set temperature to 0 or 0.1.
- 11. Use text format 'Content'.
- **12.** Save settings.
- **13.** Add Field: Simplified Body
 - **a.** Create a field named 'Simplified Body' \rightarrow Text (formatted, long).
 - **b.** Allowed text formats: 'Content'.
 - c. Enable Al Automator.
 - d. Choose LLM: Text.
 - e. Set Automator Input Mode to 'Base Mode'
 - **f.** Automator Base Field: Body
 - g. Enter the following Automator Prompt:
 https://gist.github.com/jmsaunders/2164f1ab74ddcbd4e001e1e16201c7cf
 Body Prompt

Or copy and paste here:

Rewrite the main body content (between the "Context:" delimiters) for a general audience at a 6th-grade reading level. Preserve all key ideas and logical flow, but simplify vocabulary and sentence structure. Ignore the field called title.

- **1.** Rewrite the body into 8–10 paragraphs, using simple language. Save this to field_simplified_text body.
- **2.** Rewrite the summary into a short, friendly overview (maximum 2 short paragraphs) appropriate for a general audience. Save this to field_simplified_text summary.

Requirements:

- For the body, use only these HTML tags: <h3>, , .
- For the summary, do not use any HTML.
- Output only a valid JSON array structured like this:

```
[
{ "field": "body", "value": "<h2>Rewritten body content...</h2>More text..." },
{ "field": "summary", "value": "Short rewritten summary text here." }
]
```

- Do not include any explanations, markdown, or extra commentary.

```
{{ context }}
```

- h. Curious about why this prompt works and a breakdown of its parts?

 https://docs.google.com/document/d/1VWddYMBPNlmlbVmPOzHsk0QMnQS7

 abh3/edit?usp=sharing&ouid=104928067966241346437&rtpof=true&sd=true
- 14. Open 'Advanced Settings':
- 15. Choose 'Batch' for status bar, or 'Direct' for instant response.
- 16. Set Al Provider to 'amazee.ai Al'.
- 17. In Provider Configuration, choose 'claude-3-5-sonnet'.
- **18.** Set temperature to 0 or 0.1.
- 19. Use text format 'Content'.
- **20.** Save settings.
- 21. Manage Display
 - a. Ensure the field display order is:
 - i. Links
 - ii. Body

- iii. Simplified Title
- iv. Simplified Body

22. Test It

- **a.** Create a test article.
- b. Use this sample: Graduate-level article on Tariffs (1263 words).
- **c.** https://docs.google.com/document/d/1V_K7_Nqw_eh2M14cduWsZzPJ1owkQt gzHT2SOk4QOLc/edit?usp=sharing
- **d.** Create \rightarrow Article \rightarrow Fill in title and body \rightarrow Click Save.

Some Tips and Thoughts

1. Test Prompts Manually First

Always test prompts using the AI sidebar before attaching them to automators.

- Validate output with real content.
- Fine-tune prompts for accuracy and tone.

2. Avoid Overwriting Human-Written Content

Don't allow automators to overwrite fields with valuable manual input unless intentional.

- Use separate fields (e.g., "AI Summary").
- Apply conditions (e.g., only if field is empty).

3. Use Read-Only AI Fields for Review

Have AI write to a read-only or hidden field first.

- Allows editors to review and approve content.
- Maintains editorial control.

4. Organize Recipes and Automators Clearly

Use a clear naming system (e.g., Meta: Generate, Summary: Rewrite).

- Document their purpose.
- Group logically to aid collaboration and maintenance.

5. Target Specific Content Types Only

Limit automators to relevant content types.

- Don't apply blog recipes to product pages.
- Avoid broad application that could cause errors.

6. Restrict Permissions

Bulk operations are powerful but risky.

- Create/edit automators
- Execute bulk operations
- Modify Al-generated fields This prevents accidental or malicious misuse.

7. Use Bulk AI Actions Cautiously

Control who can:

- Test on a few nodes first.
- Export or back up content before running site-wide automations.

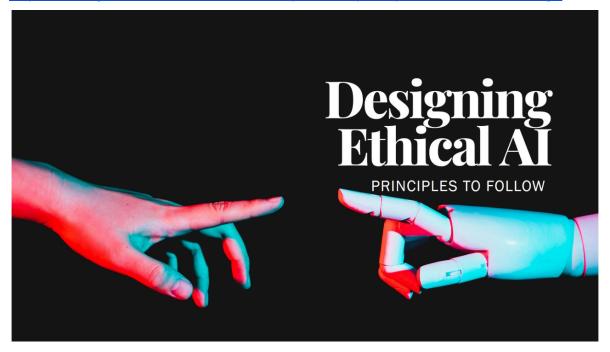
Session 5 | Ethics, Bias, and Accessibility

- Bias and mitigation
- Inclusive AI use in civic and public content
- Accessibility-forward AI use cases
- Group discussion and Q&A

Three articles for your consideration:

Designing Ethical Al

https://www.jamesmatthewsaunders.ai/post/the-principles-of-ethical-ai-design



Core Message

James Matthew Saunders presents a framework for ethical AI design based on three key principles: transparency, privacy, and fairness. He uses the Chinese AI company DeepSeek as a case study to show how a system can fulfill some ethical principles while violating others.

1. Transparency

- DeepSeek has released its source code, model architecture, and training data to the public, allowing for inspection and modification.
- Saunders considers this a positive example of transparency, emphasizing that ethical AI requires openness so users and stakeholders can understand and evaluate the system's decisions.

2. Privacy

- DeepSeek operates under Chinese laws that require it to share user data with the government.
- According to Saunders, this violates the ethical principle of privacy, which states that individuals should control who accesses their data and how it is used.

3. Fairness (Bias)

- DeepSeek's responses are influenced by government-mandated content restrictions, leading to systemic bias.
- Saunders argues that ethical AI should actively detect and reduce bias. DeepSeek
 demonstrates how AI models can reflect the priorities and limitations of those who
 train them.

Importance of These Principles

Saunders stresses that AI systems have no inherent ethics; they reflect the values—or biases—of their designers. Therefore, it is essential to build explicit ethical principles into AI systems, including transparency, bias mitigation, and respect for individual autonomy.

Key Takeaways

- Transparency supports accountability and trust.
- Privacy requires that users maintain control over their personal data.
- Fairness demands efforts to identify and remove bias from algorithms and training data.

DeepSeek illustrates that being transparent is not enough if a system also violates user privacy and fairness.

Broader Context and Related Frameworks

Saunders' model is one of many. Broader frameworks, such as those identified in academic and policy literature, often include additional principles like beneficence, sustainability, and non-maleficence. A common theme across these frameworks is that ethical principles must be implemented in practice—not just acknowledged in theory. Transparency without accountability, or fairness without enforcement, is insufficient.

Summary Table

Principle	Ethical Definition	DeepSeek Example
Transparency	Open decision-making and accessible models	Releases source code and data
Privacy	User controls personal data access	Must share user data with government authorities
Fairness	Eliminate group bias and content control	Constrained by regulatory content bias

Final Thought

Saunders offers a concise and practical framework for ethical AI design. DeepSeek's case shows that an AI system can be transparent while still falling short on privacy and fairness. The lesson is clear: ethical design must be comprehensive, balancing all core principles to ensure responsible development and deployment of AI systems.

AI Ethics and Open Source

https://www.jamesmatthewsaunders.ai/post/ai-ethics-and-open-source-why-we-can-t-sit-t his-one-out



Core Message

J. Matthew Saunders argues that open-source engagement in AI is essential. Ethical principles such as transparency, fairness, and privacy must be treated as core obligations. Choosing not to engage risks leaving AI development in the hands of unaccountable private corporations.

1. Why Open Source Matters

- Open-source software enables transparency by allowing developers and users to inspect how AI systems work.
- This openness makes it easier to identify and address ethical concerns such as bias or opaque decision-making.

2. Ethical Principles as Requirements

- Saunders emphasizes that transparency, fairness, and privacy are non-negotiable in ethical AI design.
- These values must be embedded in the design, development, and deployment of AI systems.
- Open-source infrastructure providers, like amazee.ai, play a role in maintaining these ethical standards.

3. Al as a Tool, Not a Replacement

- Al should augment—not replace—human work.
- Understanding prompt engineering is a vital skill to use AI responsibly and productively.

4. Environmental Responsibility

- Al systems are energy-intensive, especially during model training.
- Ethical use of AI includes selecting platforms that prioritize renewable energy (e.g., Amazon Bedrock's renewable targets).

5. Relevance for Open Source Communities

- Open-source communities, such as Drupal, must participate in AI development to ensure ethical standards are upheld.
- If open-source contributors stay on the sidelines, private actors will define Al's future with less transparency and fewer ethical safeguards.

Key Takeaways

Theme	Saunders's Position
Transparency	Open source fosters accountability
Fairness & Bias	Bias can be audited and mitigated through open design
Privacy	Must be a design principle embedded in infrastructure
Human augmentation	Al should enhance, not replace, human capabilities
Environmental accountability	Ethical AI includes choosing energy-efficient, renewable-first infrastructure
Community engagement	Open source must actively shape the AI landscape, not passively observe

Broader Context

While transparency is a strength of open-source AI, Saunders and other scholars warn that it is not enough. Real-world harms (e.g., misuse or ethical drift) must be addressed proactively. Studies also highlight the tension between openness and controlling misuse.

Final Thought

Open-source communities are at a crossroads. They must either help shape ethical Al design or risk being excluded from critical decisions. Saunders makes the case that open source has both the opportunity and the responsibility to lead the way.

Understanding AI and Accessibility - CivicPlus

https://www.civicplus.com/blog/wa/intersection-of-ai-and-accessibility-opportunities-challenges-best-practices/

Overview

Local governments are increasingly using artificial intelligence (AI) to improve accessibility in their digital platforms. Given that nearly 30% of U.S. adults live with a disability, AI offers a transformative path to creating more inclusive and equitable digital experiences.

Opportunities Enabled by AI

Voice-Activated Assistance

All enables voice-based navigation for individuals with visual or physical impairments, eliminating reliance on visual interfaces.

Personalization

Al can tailor digital content by adjusting text size, color contrast, layout, and adding features like closed captioning, improving usability for various needs.

Al Chatbots and Service Tools

Chatbots improve accessibility and efficiency. For example, Toronto saw a 40% increase in online service requests following chatbot implementation.

Predictive Accessibility Tools

All can detect and flag potential barriers in user experience, allowing issues to be resolved proactively.

Key Challenges

Algorithmic Bias and Representation

Al often relies on datasets that may not include enough representation of individuals with disabilities, leading to unfair or ineffective solutions.

Privacy Concerns

Al may require sensitive user data to personalize experiences, raising concerns around data privacy and trust.

Explainability of Al Systems

When AI decisions aren't transparent, they can undermine trust, especially for users relying on consistent, understandable accessibility features.

Best Practices

Adherence to WCAG Principles

Use the Web Content Accessibility Guidelines (WCAG) principles: Perceivable, Operable, Understandable, and Robust, as the foundation for accessible AI integration.

Involve People with Disabilities

Invite individuals with disabilities to test and provide feedback on digital services to ensure real-world accessibility improvements.

Transparency and Human Oversight

Explain how AI works and provide avenues for human support to ensure inclusivity and safety.

Continuous Monitoring

Use automated tools and periodic audits to ensure ongoing compliance with ADA and WCAG 2.1 AA standards.

Recommendations for Government Agencies

- Implement voice and text-based AI tools to support accessible navigation.
- Include people with disabilities in AI design and testing.
- Train AI on diverse datasets to reduce bias.
- Maintain human oversight for critical interactions.
- Use compliance tools for real-time monitoring and adjustments.

Conclusion

Al can significantly enhance digital accessibility when applied thoughtfully. By addressing algorithmic bias, ensuring transparency, and engaging affected communities, governments can leverage Al to build inclusive and equitable digital experiences that serve everyone.

Real World Example:

ChatGPT's bias in religion and theological studies comes from a biblical-theological and pastoral-exegetical framework, shaped by key elements of Reformed theology and canonical context.

(and yes - I was logged out when I asked).



Session 6 | Wrap-Up + Next Steps

- Key takeaways
- How to contribute to DrupalAI
- Community resources and opportunities

Some Resources

Amazee AI - spin up AI practice sites: https://amazee.ai/drupal-ai
Promet Source Provus Demo: https://deploy.provusdemo.com/

https://new.drupal.org/ai https://www.drupal.org/project/ai



Watch this video first: https://www.youtube.com/watch?v=XWgglffKgnY



Then this one: https://www.youtube.com/watch?v=thCrVYlw1Bk

Overview: https://www.youtube.com/watch?v=sUijTerDd1M

DrupalCon Presentation https://www.youtube.com/watch?v=RUI66lKljdE

Automators: https://www.youtube.com/watch?v=PXfmh3QXjN0

Custom AI Assistants https://www.youtube.com/watch?v=PmChGwzilck

Al Agent Swarms https://www.youtube.com/watch?v=rUi-Z2QckOM

Using AI Agents https://www.youtube.com/watch?v=crGgMEhV070

Using AI in CKEditor https://www.youtube.com/watch?v=sax0f_o8Fk4

Al Slack Channel - #ai-initiatives

Al Agents

Drupal 1.1 Agents Preview https://www.youtube.com/watch?v=YHvwYM4IL90

About Your Trainers



Rod Martin

Rod holds two masters degrees and has been training people how to do "things" for over 30 years. Originally from Australia, he grew up in Canada and now resides just outside Cincinnati, Ohio.

Rod began teaching Drupal in 2011 and has travelled hundreds of thousands of miles speaking and training all over the world.

Through his live, online, and video training, he's introduced over 50,000 people to Drupal.

Rod plays ice hockey a couple of times a week and rides his Goldwing motorcycle pretty much everywhere he can.

(https://imrodmartin.com)

He is the person behind <u>DrupalHelps.com</u>, the <u>StarterSite</u> and a ton of videos on YouTube (over 5,000,000 views).

He teaches for <u>DrupalHelps</u>, Acquia, <u>PrometSource</u>, OSTraining and Tyto Learning.



Matthew Saunders

Matthew is a digital strategy leader, Al advocate, and neurodiversity champion with deep experience in accessibility, inclusive design, and enterprise transformation. He has led Al-powered innovation at Pfizer, where he helped scale global platforms and streamline digital operations.

Today, he serves as an AI Ambassador for amazee.io and contributes to the Track Team for the Drupal AI Strategic Initiative, helping shape the future of open-source AI integration. Matthew also serves on the board of Drupal Colorado Inc. and is a regular speaker on topics like AI ethics, digital inclusion, and neurodiversity in tech. His work focuses on using technology,especially AI, to create more accessible, equitable experiences for everyone.