# Config

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## 1 Compilation

```
;; brew tap railwaycat/emacsmacport
;; brew install emacs-mac --with-mac-metal --with-natural-title-bar --with-native-compilation

--with-xwidget
```

### 2 Basic

### 2.1 ID

### 2.2 Good defaults

```
(setq-default
delete-by-moving-to-trash t
                                              ; Delete files to trash
window-combination-resize t
                                               ; take new window space from all other windows
x-stretch-cursor t)
                                               ; Stretch cursor to the glyph width
(setq undo-limit 80000000
                                               ; Raise undo-limit to 80Mb
     evil-want-fine-undo t
                                                ; By default while in insert all changes are one

→ big blob. Be more granular

     auto-save-default t
                                               ; Nobody likes to loose work, I certainly don't
     truncate-string-ellipsis "..."
     scroll-margin 2)
                                               ; It's nice to maintain a little margin
(display-time-mode 1)
                                               ; Enable time in the mode-line
(unless (string-match-p "^Power N/A" (battery)) ; On laptops...
 (display-battery-mode 1))
                                                ; it's nice to know how much power you have
(global-subword-mode 1)
                                               ; Iterate through CamelCase words
```

#### 2.2.1 Browser

```
(setq browse-url-chrome-program "brave")
```

#### 2.2.2 Which-key

#### 2.3 Visual

#### 2.3.1 Font

#### 2.3.2 Theme

1. Default theme

```
;; (load-theme 'catppuccin t t)
(setq doom-theme 'doom-nord-aurora)
;; (setq catppuccin-flavor 'frappe) ;; or 'latte, 'macchiato, or 'mocha
;; (catppuccin-reload)
```

2. Treemacs styling

#### 2.3.3 Default visual

Transparency and fontification

```
;; Corrects (and improves) org-mode's native fontification.
(doom-themes-org-config)

;; set transparency
(set-frame-parameter (selected-frame) 'alpha '(99 99))
(add-to-list 'default-frame-alist '(alpha 99 99))
(add-to-list 'default-frame-alist '(fullscreen . maximized))
```

### 2.3.4 Starting image

```
(setq fancy-splash-image (expand-file-name "themes/doom-emacs-bw-light.svg" doom-user-dir))
```

#### 2.3.5 Theme Magic

(doom-color 'type)
(doom-color 'keywords)
(doom-color 'constants)
(doom-color 'functions)

(face-attribute 'default :foreground)
(face-attribute 'shadow :foreground)
(doom-blend 'base8 'error 0.1)
(doom-blend 'base8 'success 0.1)
(doom-blend 'base8 'type 0.1)
(doom-blend 'base8 'keywords 0.1)
(doom-blend 'base8 'constants 0.1)
(doom-blend 'base8 'functions 0.1)
(face-attribute 'default :foreground))))

## 2.4 Marginalia

```
(package! info-colors)

(after! info-colors
    :commands (info-colors-fontify-node))
(add-hook! 'Info-selection-hook 'info-colors-fontify-node)
```

### 2.5 File Templates

```
(set-file-template! "\\.tex$" :trigger "__" :mode 'latex-mode)
(set-file-template! "\\.org$" :trigger "__" :mode 'org-mode)
```

### 2.6 Editor config

```
(setq display-line-numbers-type `relative)
(setq-default tab-width 4)
(setq byte-compile-warnings '(cl-functions))
```

## 3 Org-Mode

### 3.1 Defaults

```
(setq org-directory "~/org/"
      org-agenda-files (list org-directory)
                                                                 ; Seems like the obvious place.
      org-use-property-inheritance\ t
                                                                  ; It's convenient to have properties
      \hookrightarrow inherited.
      org-log-done 'time
                                                                  ; Having the time a item is done
      \hookrightarrow sounds convenient.
                                                                 ; Have a. A. a) A) list bullets.
      org-list-allow-alphabetical t
      org-catch-invisible-edits 'smart
                                                                 ; Try not to accidently do weird stuff
      \hookrightarrow in invisible regions.
      org-export-with-sub-superscripts '{}
                                                                 ; Don't treat lone _ / ^ as

    sub/superscripts, require _{} / ^{}.

      org-export-allow-bind-keywords t
                                                                 ; Bind keywords can be handy
      org-image-actual-width '(0.9))
                                                                  ; Make the in-buffer display closer to
      \hookrightarrow the exported result..#+end_src
```

#### 3.2 Babel

### 3.3 Visuals

#### 3.3.1 Org-modern

```
org-modern-table-vertical 1
org-modern-table-horizontal 0.2
org-modern-list '((43 . " ")
                 (45 . "-")
                  (42 . "•"))
org-modern-todo-faces
'(("TODO" :inverse-video t :inherit org-todo)
 ("PROJ" :inverse-video t :inherit +org-todo-project)
  ("STRT" :inverse-video t :inherit +org-todo-active)
  ("[-]" :inverse-video t :inherit +org-todo-active)
  ("HOLD" :inverse-video t :inherit +org-todo-onhold)
  ("WAIT" :inverse-video t :inherit +org-todo-onhold)
  ("[?]" :inverse-video t :inherit +org-todo-onhold)
  ("KILL" :inverse-video t :inherit +org-todo-cancel)
  ("NO" :inverse-video t :inherit +org-todo-cancel))
org-modern-footnote
(cons nil (cadr org-script-display))
org-modern-block-fringe nil
org-modern-block-name
'((t . t)
  ("src" "»" "«")
  ("example" ">-" "-«")
  ("quote" " " " ")
  ("export" " " " "))
org-modern-progress nil
org-modern-priority nil
org-modern-horizontal-rule (make-string 36 ?)
org-modern-keyword
'((t . t)
  ("title" . " ")
  ("subtitle" . " ")
  ("author" . " ")
  ("email" . #(" " 0 1 (display (raise -0.14))))
  ("date" . " ")
  ("property" . " ")
  ("options" . " ")
  ("startup" . " ")
  ("macro" . " ")
  ("bind" . #(" " 0 1 (display (raise -0.1))))
  ("bibliography" . " ")
  ("print_bibliography" . #(" " 0 1 (display (raise -0.1))))
  ("cite_export" . " ")
  ("print_glossary" . #(" " 0 1 (display (raise -0.1))))
  ("glossary_sources" . #(" " 0 1 (display (raise -0.14))))
  ("include" . " ")
  ("setupfile" . "")
  ("html_head" . " ")
  ("html" . " ")
  ("latex_class" . " ")
  ("latex_class_options" . #(" " 1 2 (display (raise -0.14))))
  ("latex_header" . " ")
```

```
("latex_header_extra" . " ")
        ("latex" . " ")
        ("beamer_theme" . " ")
        ("beamer_color_theme" . #(" " 1 2 (display (raise -0.12))))
        ("beamer_font_theme" . " ")
        ("beamer_header" . " ")
        ("beamer" . " ")
        ("attr_latex" . " ")
        ("attr_html" . " ")
        ("attr_org" . " ")
        ("call" . #(" " 0 1 (display (raise -0.15))))
        ("name" . " ")
        ("header" . ">")
        ("caption" . " ")
        ("results" . " ")))
(custom-set-faces! '(org-modern-statistics :inherit org-checkbox-statistics-todo)))
```

```
(after! spell-fu
  (cl-pushnew 'org-modern-tag (alist-get 'org-mode +spell-excluded-faces-alist)))
```

#### 3.3.2 General

```
(add-hook 'org-mode-hook #'+org-pretty-mode)
```

```
(setq org-src-fontify-natively t
     org-fontify-whole-heading-line t
     org-fontify-done-headline t
     org-fontify-quote-and-verse-blocks t
     org-startup-with-inline-images t
     org-startup-indented t
     ;; Org styling, hide markup etc.
     org-pretty-entities t
(setq org-ellipsis " "
     org-hide-leading-stars t
     org-priority-highest ?A
     org-priority-lowest ?E
     org-priority-faces
     '((?A . 'all-the-icons-red)
       (?B . 'all-the-icons-orange)
       (?C . 'all-the-icons-yellow)
       (?D . 'all-the-icons-green)
        (?E . 'all-the-icons-blue)))
(setq org-inline-src-prettify-results '(" " . " "))
(setq doom-themes-org-fontify-special-tags nil)
```

```
(custom-set-faces!
  '(outline-1 :weight extra-bold :height 1.25)
  '(outline-2 :weight bold :height 1.15)
  '(outline-3 :weight bold :height 1.12)
  '(outline-4 :weight semi-bold :height 1.09)
  '(outline-5 :weight semi-bold :height 1.06)
  '(outline-6 :weight semi-bold :height 1.03)
  '(outline-8 :weight semi-bold)
  '(outline-9 :weight semi-bold))
(custom-set-faces!
  '(org-document-title :height 1.2))
```

### 3.3.3 Org-appear

### 3.3.4 Ligatures

```
(appendg! +ligatures-extra-symbols
         (list :list_property " "
             :em_dash "-"
:ellipses "..."
               :arrow_right "→"
               :arrow_left "←"
               :arrow_lr " "
               :properties ""
                       11 11
               :end
               :priority_a #(" " 0 1 (face all-the-icons-red))
               :priority_b #(" " 0 1 (face all-the-icons-orange))
               :priority_c #(" " 0 1 (face all-the-icons-yellow))
               :priority_d #(" " 0 1 (face all-the-icons-green))
               :priority_e #(" " 0 1 (face all-the-icons-blue))))
(defadvice! +org-init-appearance-h--no-ligatures-a ()
 :after #'+org-init-appearance-h
 (set-ligatures! 'org-mode nil)
 (set-ligatures! 'org-mode
```

#### 3.3.5 Latex improvement

```
(setq org-highlight-latex-and-related '(native script entities))

(require 'org-src)
(add-to-list 'org-src-block-faces '("latex" (:inherit default :extend t)))

;; (package! org-fragtog)

;; :hook (org-mode . org-fragtog-mode))
```

### 3.4 Bullets

```
(setq org-list-demote-modify-bullet '(("+" . "-") ("-" . "+") ("*" . "+") ("1." . "a.")))
```

### 3.5 Agenda

### 3.5.1 Visual

```
(after! org-agenda
  (setq org-agenda-deadline-faces
   '((1.001 . error)
        (1.0 . org-warning)
        (0.5 . org-upcoming-deadline)
        (0.0 . org-upcoming-distant-deadline))))
```

### 3.6 Super-Agenda

```
;; (package! org-super-agenda)
```

### **3.6.1** Config

#### 3.6.2 Customize

#### 3.7 Roam

### 3.7.1 Defaults

### 3.7.2 Daily

### 3.7.3 Visuals

1. UI and visualization

```
" (\\1-\\2-\\3) "
      (subst-char-in-string ?_ ? buffer-file-name))
   (funcall orig-fun)))
(use-package! websocket
 :after org-roam)
(use-package! org-roam-ui
 :after org-roam
 :commands org-roam-ui-open
 :hook (org-roam . org-roam-ui-mode)
 (setq org-roam-ui-sync-theme t
       org-roam-ui-follow t
       org-roam-ui-update-on-save t
       org-roam-ui-open-on-start t)
 (require 'org-roam) ; in case autoloaded
 (defun org-roam-ui-open ()
   "Ensure the server is active, then open the roam graph."
   (interactive)
   (unless org-roam-ui-mode (org-roam-ui-mode 1))
   (browse-url--browser (format "http://localhost:%d" org-roam-ui-port))))
```

### 3.8 Ob-async

### 3.8.1 Julia support

### 3.8.2 Jupyter Integration

```
(setq ob-async-no-async-languages-alist '("jupyter-python" "jupyter-julia"))
```

### 3.9 Org-Diff

### 3.10 Pandoc import

```
(use-package! org-pandoc-import
    :after org)
```

### 3.11 Export

#### 3.11.1 Preview

```
(map! :map org-mode-map
      :localleader
      :desc "View exported file" "v" #'org-view-output-file)
(defun org-view-output-file (&optional org-file-path)
 "Visit buffer open on the first output file (if any) found, using
  → `org-view-output-file-extensions'"
  (interactive)
  (let* ((org-file-path (or org-file-path (buffer-file-name) ""))
         (dir (file-name-directory org-file-path))
         (basename (file-name-base org-file-path))
         (output-file nil))
    (dolist (ext org-view-output-file-extensions)
      (unless output-file
        (when (file-exists-p
              (concat dir basename "." ext))
          (setq output-file (concat dir basename "." ext)))))
    (if output-file
        (if (member (file-name-extension output-file) org-view-external-file-extensions)
            (browse-url-xdg-open output-file)
```

### 3.12 Zotero Integration

```
(package! zotxt)

(use-package! zotxt
  :after org)
```

### 3.13 Org-Chef

```
(package! org-chef)

(use-package! org-chef
   :commands (org-chef-insert-recipe org-chef-get-recipe-from-url))
```

### 3.14 Bibtex-Integration

#### 3.14.1 Citar

```
(package! org-cite-csl-activate :recipe (:host github :repo

¬ "andras-simonyi/org-cite-csl-activate"))
```

```
(use-package! oc-csl
  :after oc
  :config
  (setq org-cite-csl-styles-dir "~/Zotero/styles/"))
```

```
(after! oc
  (setq org-cite-export-processors '((t csl))))
```

### 3.14.2 Org-Roam integration

```
(use-package! citar-org-roam
 :after citar org-roam
 :config (citar-org-roam-mode))
(setq org-roam-capture-templates
     '(("d" "default" plain
        "%?"
        :target
        (file+head
         "%<%Y%m%d%H%M%S>-${slug}.org"
         "#+title: ${title}\n")
        :unnarrowed t)
        ("n" "literature note" plain
        "%?"
        :target
        (file+head
         "%(expand-file-name \"literature\" org-roam-directory)/${citekey}.org"
         "#+title: ${citekey}. ${title}.\n#+created: %U\n#+last_modified: %U\n\n")
         :unnarrowed t)))
(setq citar-org-roam-capture-template-key "n")
```

### 3.15 Latex templates

#### 3.15.1 Preview

### 1. PNG

```
(plist-put org-format-latex-options :scale 1))
(setq org-preview-latex-default-process 'dvisvgm)
(setq org-preview-latex-image-directory "~/.cache/ltximg/")
)
```

#### 2. Header

```
(setq org-format-latex-header "\\documentclass[12pt]
{article}
\\usepackage[usenames]{xcolor}
\\usepackage{booktabs}
\\pagestyle{empty}
                          % do not remove
% The settings below are copied from fullpage.sty
\\setlength{\\textwidth}{\\paperwidth}
\\addtolength{\\textwidth}{-3cm}
\\setlength{\\oddsidemargin}{1.5cm}
\\setlength{\\evensidemargin}{\\oddsidemargin}
\\setlength{\\textheight}{\\paperheight}
\\addtolength{\\textheight}{-\\headheight}
\\addtolength{\\textheight}{-\\headsep}
\\addtolength{\\textheight}{-\\footskip}
\\addtolength{\\textheight}{-3cm}
\\setlength{\\topmargin}{1.5cm}
% my custom stuff
\\usepackage{xfrac}
\\usepackage{siunitx}
\\usepackage{diffcoeff}
\\usepackage{nicematrix}
\\DeclareMathOperator{\\Var}{Var}
\\DeclareMathOperator{\\cov}{Cov}
\verb|\DeclareMathOperator{\E}{\mathbb{E}}|
\\DeclareMathOperator*{\\argmax}{arg\\,max}
\\DeclareMathOperator*{\\argmin}{arg\\,min}
")
```

#### **3.15.2** Article

```
\\usepackage{graphicx}
\\usepackage{mathtools}
\\usepackage{wrapfig}
\\usepackage{amsthm}
\\usepackage{amssymb}
\\usepackage{newpxtext}
\\usepackage[varbb]{newpxmath}
\\usepackage{xfrac}
\\usepackage{siunitx}
\\usepackage{caption}
\\captionsetup{labelfont=bf,font={small,singlespacing}}
\\usepackage{subcaption}
\\usepackage{cancel}
\\usepackage{setspace}
\\usepackage{xcolor}
\\usepackage{diffcoeff}
\\usepackage{nicematrix}
\\usepackage{enumitem}
\\usepackage{acronym}
\\usepackage{xurl}
\\onehalfspacing{}
\\DeclareMathOperator{\\Var}{Var}
\\DeclareMathOperator{\\cov}{Cov}
\\DeclareMathOperator{\\E}{\\mathbb{E}}}
\\DeclareMathOperator*{\\argmax}{arg\\,max}
\\DeclareMathOperator*{\\argmin}{arg\\,min}
\\DeclarePairedDelimiter\\abs{\\lvert}{\\rvert}
\\DeclarePairedDelimiter\\norm{\\lVert}{\\rVert}
\label{limiterX} $$ \operatorname{PairedDelimiterX}_{2}_{\ngle}_{41,\#2} $$
\\DeclarePairedDelimiterX\\braket[3]{\\langle}{\\rangle}%
{\#1\,\delimsize\\,\,\mathopen{}\#2\,\delimsize\\,\,\mathopen{}\#3}
\\providecommand\\given{}
\\DeclarePairedDelimiterXPP\\Prob[1]{\\mathbb{P}} (){}{
\\renewcommand\\given{\\nonscript\\:\\delimsize\\vert\\nonscript\\:\\mathopen{}}
#1}
\\DeclarePairedDelimiterXPP\\condVar[2]{\\Var} (){}{
\\renewcommand\\given{\\nonscript\\:\\delimsize\\vert\\nonscript\\:\\mathopen{}}
\\DeclarePairedDelimiterXPP\\condCov[2]{\\cov} (){}{
\label{thm:linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_lin
#1,#2}
\\theoremstyle{plain}% default
\\newtheorem{thm}{Theorem}
\\newtheorem{lem}[thm]{Lemma}
\\newtheorem{prop}[thm]{Proposition}
```

```
\\newtheorem*{cor}{Corollary}
\\theoremstyle{definition}
\\newtheorem{defn}{Definition}
\\newtheorem{exmp}{Example}
\\providecommand*{\\defnautorefname}{Definition}
\\theoremstyle{remark}
\\newtheorem*{rem}{Remark}
\\newtheorem*{note}{Note}
\\newtheorem{case}{Case}
\\renewcommand{\\leq}{\\leqslant}
\\renewcommand{\\geq}{\\geqslant}
\\definecolor{bgcolorminted}{HTML}{f9f5d7}
\\usepackage{hyperref}
\\usepackage[]{cleveref}
[NO-DEFAULT-PACKAGES]
[PACKAGES]
[EXTRA]"
               ("\\section{%s}" . "\\section*{%s}")
               ("\\subsection{%s\" . "\\subsection*{%s\")
               ("\\subsubsection{%s\" . "\\subsubsection*{%s\")
               ("\\paragraph{\%s}" . "\\paragraph*{\%s}"))))
```

#### 3.15.3 Beamer

Define Beamer class:

```
(with-eval-after-load 'ox-latex
(add-to-list 'org-latex-classes
            '("beamer"
               "\\documentclass[c]{beamer}
\\usepackage[american]{babel}
\\usetheme[progressbar=frametitle, titleformat=smallcaps, numbering=fraction]{metropolis}
\\usepackage{booktabs}
\\usepackage{float}
\\usepackage{mathtools}
\\usepackage{amsthm}
\\usepackage{amssymb}
\\usepackage[varbb]{newpxmath}
\\usepackage[]{xfrac}
\\usepackage{siunitx}
\\usepackage{graphicx}
\\usepackage{caption}
\\captionsetup{labelfont=bf,font={small,singlespacing}}
```

```
\\usepackage{subcaption}
\\usepackage{cancel}
\\usepackage{setspace}
\\usepackage{xcolor}
\\usepackage{diffcoeff}
\\usepackage{nicematrix}
\\usepackage{acronym}
\\usepackage{appendixnumberbeamer}
\\usepackage{dirtytalk}
\\usepackage{xurl}
\\DeclareMathOperator{\\Var}{Var}
\\DeclareMathOperator{\\cov}{Cov}
\verb|\DeclareMathOperator{\E}{\mathbb{E}}|
\\DeclareMathOperator*{\\argmax}{arg\\,max}
\\DeclareMathOperator*{\\argmin}{arg\\,min}
\label{eq:lemmand} $$ \operatorname{LE}_{2} \left[ \#2 \right] $$ \operatorname{LE}_{2} \left[ \#1 \right] $$
\\DeclarePairedDelimiter\\abs{\\lvert}{\\rvert}
\\DeclarePairedDelimiter\\norm{\\lVert}{\\rVert}
\\DeclarePairedDelimiterX\\innerp[2]{\\langle}{\\rangle}{\#1,#2}
\\DeclarePairedDelimiterX\\braket[3]{\\langle}{\\rangle}%
{#1\\,\\delimsize\\vert\\,\\mathopen{}#3}
\\providecommand\\given{}
\\DeclarePairedDelimiterXPP\\Prob[1]{\\mathbb{P}} (){}{
\\renewcommand\\given{\\nonscript\\:\\delimsize\\vert\\nonscript\\:\\mathopen{}}
#1}
\\DeclarePairedDelimiterXPP\\condE[1]{\\E} (){}{
\\renewcommand\\given{\\nonscript\\:\\delimsize\\vert\\nonscript\\:\\mathopen{}}
\\DeclarePairedDelimiterXPP\\condVar[2]{\\Var} (){}{
\label{thm:linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_linear_lin
\\DeclarePairedDelimiterXPP\\condCov[2]{\\cov} (){}{
\\renewcommand\\given{\\nonscript\\:\\delimsize\\vert\\nonscript\\:\\mathopen{}}
#1,#2}
\\theoremstyle{plain}% default
\\newtheorem{thm}{Theorem}
\\newtheorem{lem}[thm]{Lemma}
\\newtheorem{prop}[thm]{Proposition}
\\newtheorem*{cor}{Corollary}
\\theoremstyle{definition}
\\newtheorem{defn}{Definition}
\\newtheorem{exmp}{Example}
\\providecommand*{\\defnautorefname}{Definition}
\\theoremstyle{remark}
\\newtheorem*{rem}{Remark}
\\newtheorem{case}{Case}
\\definecolor{dblue}{HTML}{2E3440}
```

```
\\definecolor{umber}{HTML}{8FBCBB}
\\definecolor{alertcolor}{HTML}{BF616A}
\\definecolor{examplecolor}{HTML}{EBCB8B}
\\definecolor{pale}{HTML}{ECEFF4}
\\definecolor{bluish}{HTML}{88C0D0}
\\definecolor{cream}{HTML}{D8DEE9}
\\definecolor{bgcolorminted}{HTML}{f9f5d7}
\\setbeamercolor{progress bar}{fg=bluish,bg=cream}
\\setbeamercolor{frametitle}{fg=umber,bg=pale}
\\setbeamercolor{normal text}{fg=dblue,bg=pale}
\\setbeamercolor{alerted text}{fg=alertcolor,bg=pale}
\\setbeamercolor{example text}{fg=examplecolor}
\\setbeamercovered{dynamic}
\\usecolortheme{rose}
\\usepackage{hyperref}
\\usepackage[]{cleveref}
[NO-DEFAULT-PACKAGES]
[PACKAGES]
[EXTRA]"
               ("\\section{%s}" . "\\section*{%s}")
               ("\\subsection{%s}" . "\\subsection*{%s}")
               ("\\subsubsection{%s\" . "\\subsubsection*{%s\")
               ("\\paragraph{%s}" . "\\paragraph*{%s}")
               ("\\subparagraph{%s}" . "\\subparagraph*{%s}")))
```

### 3.15.4 Export

```
(setq org-latex-pdf-process '("LC_ALL=en_US.UTF-8 latexmk -f -pdf -%latex -shell-escape

→ -interaction=nonstopmode -output-directory=%o %f"))
```

```
(setq org-latex-tables-booktabs t
     org-latex-hyperref-template "\\providecolor{url}{HTML}{81a1c1}
\\providecolor{link}{HTML}{d08770}
\\providecolor{cite}{HTML}{d08770}
\\hypersetup{
pdfauthor={%a},
pdftitle={%t},
pdfkeywords={%k},
pdfsubject={%d},
pdfcreator={%c},
pdflang={%L},
breaklinks=true,
colorlinks=true,
linkcolor=link,
urlcolor=url.
citecolor=cite
}
```

```
org-latex-reference-command "\\cref{%s}")
```

#### 1. Preview

#### 2. Code blocks

```
(package! engrave-faces)

;; (setq org-latex-listings 'minted
;; org-latex-packages-alist '(("" "minted")))
;; (setq org-latex-minted-options '(("breaklines" "true")
;; ("breakanywhere" "true")
;; ("bgcolor" "bgcolorminted")
;; ("linenos" "true")))
(use-package! engrave-faces-latex
    :after ox-latex)
(setq org-latex-src-block-backend 'engraved)
(setq org-latex-engraved-theme 'doom-nord-light)
```

### 3.16 Capture

### 3.16.1 Doct

```
(package! doct)
```

Prettify the captures:

```
(when-let* ((props (nthcdr (if (= (length template) 4) 2 5)

    template))

                                             (spec (plist-get (plist-get props :doct) :icon)))
                                   (setf (nth 1 template) (concat
                                   (nth 1 template))))
                                 template)
                               templates))))
(setq doct-after-conversion-functions '(+doct-iconify-capture-templates))
(defvar +org-capture-recipies "~/org/recipies.org")
(defun set-org-capture-templates ()
 (setq org-capture-templates
       (doct `(("Personal todo" :keys "t"
                :icon ("checklist" :set "octicon" :color "green")
                :file +org-capture-todo-file
                :prepend t
                :headline "Inbox"
                :type entry
                :template ("* TODO %?"
                          "%i %a"))
               ("Personal note" :keys "n"
                :icon ("sticky-note-o" :set "faicon" :color "green")
                :file +org-capture-todo-file
                :prepend t
                :headline "Inbox"
                :type entry
                :template ("* %?"
                          "%i %a"))
               ("Email" :keys "e"
                :icon ("envelope" :set "faicon" :color "blue")
                :file +org-capture-todo-file
                :prepend t
                :headline "Inbox"
                :type entry
                :template ("* TODO %^{type|reply to|contact} %\\3 %? :email:"
                          "Send an email %^{urgancy|soon|ASAP|anon|at some point|eventually} to
                          "about %^{topic}"
                          "%U %i %a"))
               ("Meeting" :keys "m"
                :icon ("users" :set "faicon")
                :file "~/org/meeting.org"
                :preprend t
                :headline "Meetings"
                :type entry
                :template ("* %^{Topic}
                             + Attendees: %^{Attendees},Leo
```

```
+ Date: %U
             ** Notes
                + %?
              ** Actions
                + []
                          "))
("Interesting" :keys "i"
:icon ("eye" :set "faicon" :color "lcyan")
:file +org-capture-todo-file
:prepend t
:headline "Interesting"
:type entry
:template ("* [ ] %{desc}%? :%{i-type}:"
           "%i %a")
:children (("Webpage" :keys "w"
            :icon ("globe" :set "faicon" :color "green")
            :desc "%(org-cliplink-capture) "
            :i-type "read:web")
            ("Article" :keys "a"
            :icon ("file-text" :set "octicon" :color "yellow")
            :desc ""
            :i-type "read:reaserch")
           ("\tRecipie" :keys "r"
            :icon ("spoon" :set "faicon" :color "dorange")
            :file +org-capture-recipies
            :headline "Unsorted"
            :template "%(org-chef-get-recipe-from-url)")
            ("Information" :keys "i"
            :icon ("info-circle" :set "faicon" :color "blue")
            :desc ""
            :i-type "read:info")
            ("Idea" :keys "I"
            :icon ("bubble_chart" :set "material" :color "silver")
            :desc ""
            :i-type "idea")))
("Tasks" :keys "k"
:icon ("inbox" :set "octicon" :color "yellow")
:file +org-capture-todo-file
:prepend t
:headline "Tasks"
:type entry
:template ("* TODO %? %^G%{extra}"
           "%i %a")
:children (("General Task" :keys "k"
            :icon ("inbox" :set "octicon" :color "yellow")
            :extra "")
           ("Task with deadline" :keys "d"
            :icon ("timer" :set "material" :color "orange" :v-adjust -0.1)
            :extra "\nDEADLINE: %^{Deadline:}t")
           ("Scheduled Task" :keys "s"
            :icon ("calendar" :set "octicon" :color "orange")
             :extra "\nSCHEDULED: %^{Start time:}t")))
```

```
("Project" :keys "p"
                 :icon ("repo" :set "octicon" :color "silver")
                 :prepend t
                 :type entry
                 :headline "Inbox"
                 :template ("* %{time-or-todo} %?"
                           "%i"
                           "%a")
                 :file ""
                 :custom (:time-or-todo "")
                 :children (("Project-local todo" :keys "t"
                            :icon ("checklist" :set "octicon" :color "green")
                            :time-or-todo "TODO"
                             :file +org-capture-project-todo-file)
                            ("Project-local note" :keys "n"
                            :icon ("sticky-note" :set "faicon" :color "yellow")
                            :time-or-todo "%U"
                             :file +org-capture-project-notes-file)
                            ("Project-local changelog" :keys "c"
                             :icon ("list" :set "faicon" :color "blue")
                             :time-or-todo "%U"
                             :heading "Unreleased"
                             :file +org-capture-project-changelog-file)))
                ("\tCentralised project templates"
                :keys "o"
                 :type entry
                 :prepend t
                 :template ("* %{time-or-todo} %?"
                            "%i"
                            "%a")
                 :children (("Project todo"
                            :keys "t"
                            :prepend nil
                             :time-or-todo "TODO"
                             :heading "Tasks"
                             :file +org-capture-central-project-todo-file)
                            ("Project note"
                             :keys "n"
                             :time-or-todo "%U"
                             :heading "Notes"
                             :file +org-capture-central-project-notes-file)
                            ("Project changelog"
                             :keys "c"
                             :time-or-todo "%U"
                             :heading "Unreleased"
                             :file +org-capture-central-project-changelog-file))))))
(set-org-capture-templates)
(unless (display-graphic-p)
 (add-hook! 'server-after-make-frame-hook
            (defun org-capture-reinitialise-hook ()
```

```
(defun org-mks-pretty (table title &optional prompt specials)
 "Select a member of an alist with multiple keys. Prettified.
TABLE is the alist which should contain entries where the car is a string.
There should be two types of entries.
1. prefix descriptions like (\"a\" \"Description\")
  This indicates that `a' is a prefix key for multi-letter selection, and
  that there are entries following with keys like \"ab\", \"ax\"...
2. Select-able members must have more than two elements, with the first
  being the string of keys that lead to selecting it, and the second a
  short description string of the item.
The command will then make a temporary buffer listing all entries
that can be selected with a single key, and all the single key
prefixes. When you press the key for a single-letter entry, it is selected.
When you press a prefix key, the commands (and maybe further prefixes)
under this key will be shown and offered for selection.
TITLE will be placed over the selection in the temporary buffer,
PROMPT will be used when prompting for a key. SPECIALS is an
alist with (\"key\" \"description\") entries. When one of these
is selected, only the bare key is returned."
 (save-window-excursion
    (let ((inhibit-quit t)
          (buffer (org-switch-to-buffer-other-window "*Org Select*"))
          (prompt (or prompt "Select: "))
          case-fold-search
          current)
      (unwind-protect
          (catch 'exit
            (while t
              (setq-local evil-normal-state-cursor (list nil))
              (erase-buffer)
              (insert title "\n\")
              (let ((des-keys nil)
                    (allowed-keys '("\C-g"))
                    (tab-alternatives '("\s" "\t" "\r"))
                    (cursor-type nil))
                ;; Populate allowed keys and descriptions keys
                ;; available with CURRENT selector.
                (let ((re (format "\\`%s\\(.\\)\\'"
                                  (if current (regexp-quote current) "")))
                      (prefix (if current (concat current " ") "")))
                  (dolist (entry table)
```

```
(pcase entry
                    ;; Description.
                    (`(,(and key (pred (string-match re))) ,desc)
                     (let ((k (match-string 1 key)))
                       (push k des-keys)
                       ;; Keys ending in tab, space or RET are equivalent.
                       (if (member k tab-alternatives)
                          (push "\t" allowed-keys)
                        (push k allowed-keys))
                       (insert (propertize prefix 'face 'font-lock-comment-face) (propertize k
                       \hookrightarrow 'face 'bold) (propertize ">" 'face 'font-lock-comment-face) " " desc
                       ;; Usable entry.
                    (`(,(and key (pred (string-match re))) ,desc . ,_)
                     (let ((k (match-string 1 key)))
                       (insert (propertize prefix 'face 'font-lock-comment-face) (propertize k
                       (push k allowed-keys)))
                    (_ nil))))
              ;; Insert special entries, if any.
               (when specials
                (insert "
                                    \n")
                (pcase-dolist (`(,key ,description) specials)

    description))

                  (push key allowed-keys)))
              ;; Display UI and let user select an entry or
               ;; a sub-level prefix.
              (goto-char (point-min))
               (unless (pos-visible-in-window-p (point-max))
                (org-fit-window-to-buffer))
               (let ((pressed (org--mks-read-key allowed-keys
                                              prompt
                                              (not (pos-visible-in-window-p (1-
                                              (setq current (concat current pressed))
                (cond
                 ((equal pressed "\C-g") (user-error "Abort"))
                 ;; Selection is a prefix: open a new menu.
                 ((member pressed des-keys))
                 ;; Selection matches an association: return it.
                 ((let ((entry (assoc current table)))
                    (and entry (throw 'exit entry))))
                 ;; Selection matches a special entry: return the
                 ;; selection prefix.
                 ((assoc current specials) (throw 'exit current))
                 (t (error "No entry available")))))))
       (when buffer (kill-buffer buffer))))))
(advice-add 'org-mks :override #'org-mks-pretty)
```

## 4 Company

Improve the history size:

```
(set-company-backend!
  '(text-mode
   markdown-mode
   gfm-mode)
  '(:seperate
   company-ispell
   company-files
   company-yasnippet))
```

### 5 LSP

### 5.1 Digestif

```
;; (after! lsp-mode
;; (setq lsp-tex-server 'digestif))
```

### 5.2 LTex

```
;; (package! lsp-ltex)
;; (package! eglot-ltex :recipe (:host github :repo "emacs-languagetool/eglot-ltex"))
```

### 6 VLFI

```
(package! vlfi)

(use-package! vlf-setup
   :defer-incrementally vlf-tune vlf-base vlf-write vlf-search vlf-occur vlf-follow vlf-ediff vlf)
```

### 7 PDF-Tools

### 7.1 Dark mode

```
;; (add-hook 'pdf-tools-enabled-hook 'pdf-view-midnight-minor-mode)
```

### 8 Option key Fix

### 9 Centaur

```
;; (after! centaur-tabs
;; (centaur-tabs-mode -1)
;; (setq centaur-tabs-height 36
;; centaur-tabs-set-icons t
;; centaur-tabs-modified-marker "o"
;; centaur-tabs-close-button "x"
;; centaur-tabs-set-bar 'above
;; centaur-tabs-gray-out-icons 'buffer)
;; (centaur-tabs-change-fonts "P22 Underground Book" 160))
;; (setq x-underline-at-descent-line t)
```

### 10 Email

### 10.1 mu4e

```
;; add to $DOOMDIR/config.el
(after! mu4e
 (setq sendmail-program (executable-find "msmtp")
       send-mail-function #'smtpmail-send-it
       message-sendmail-f-is-evil t
       message-sendmail-extra-arguments '("--read-envelope-from")
       message-send-mail-function #'message-send-mail-with-sendmail)
 ;; how often to call it in seconds:
  (setq mu4e-sent-messages-behavior 'sent ;; Save sent messages
         mu4e-headers-auto-update t
                                     ; avoid to type `g' to update
        mu4e-compose-signature-auto-include nil   ; I don't want a message signature
        mu4e-context-policy 'pick-first ;; Start with the first context
         mu4e-compose-context-policy 'ask) ;; Always ask which context to use when composing a new
  (setq mu4e-update-interval (* 1 60))
  (setq mu4e-attachment-dir "~/Downloads")
  (set-email-account! "gmail"
                                           . "/gmail/[Gmail]/Sent Mail")
                    '((mu4e-sent-folder
                      (mu4e-drafts-folder . "/gmail/[Gmail]/Drafts")
                      (mu4e-trash-folder . "/gmail/[Gmail]/Trash")
                      (mu4e-refile-folder
                                            . "/gmail/[Gmail]/All Mail")
                      (smtpmail-smtp-user . "leoaparisi@gmail.com")
                      (mu4e-compose-signature . "---\nLeo Aparisi de Lannoy"))
                    t)
  (set-email-account! "U Chicago"
                    '((mu4e-sent-folder
                                          . "/UChicago/Sent Mail")
                      (mu4e-drafts-folder . "/UChicago/Drafts")
                      (mu4e-trash-folder . "/UChicago/Trash")
                      (mu4e-refile-folder . "/UChicago/All Mail")
                      (smtpmail-smtp-user . "laparisidelannoy@uchicago.edu")
                      (mu4e-compose-signature . "---\nLeo Aparisi de Lannoy"))
                    t)
 (setq +mu4e-gmail-accounts '(("leoaparisi@gmail.com" . "/gmail/[Gmail]")))
 (setq mu4e-compose-dont-reply-to-self t)
 ;; Add a unified inbox shortcut
 (add-to-list
  'mu4e-bookmarks
  '(:name "Unified inbox" :query "maildir:/.*inbox/" :key ?i) t)
(add-hook 'mu4e-compose-mode-hook 'company-mode)
```

### 10.2 Notification

```
(mu4e-alert-set-default-style 'notifier)
(add-hook 'after-init-hook #'mu4e-alert-enable-notifications)
```

### **11 RSS**

```
(add-hook! 'elfeed-search-mode-hook #'elfeed-update)
(after! elfeed
  (setq elfeed-goodies/entry-pane-position 'bottom)
  (setq rmh-elfeed-org-files '("~/org/elfeed.org")))
```

#### 11.1 Visual

```
(after! elfeed
  (setq elfeed-search-filter "@1-week-ago +unread"
       elfeed-search-print-entry-function '+rss/elfeed-search-print-entry
       elfeed-search-title-min-width 80
       elfeed-show-entry-switch #'switch-to-buffer
        elfeed-show-entry-delete #'+rss/delete-pane
        elfeed-show-refresh-function #'+rss/elfeed-show-refresh--better-style
        shr-max-image-proportion 0.6)
  (add-hook! 'elfeed-show-mode-hook (hide-mode-line-mode 1))
  (add-hook! 'elfeed-search-update-hook #'hide-mode-line-mode)
  (defface elfeed-show-title-face '((t (:weight ultrabold :slant italic :height 1.5)))
   "title face in elfeed show buffer"
   :group 'elfeed)
  (defface elfeed-show-author-face `((t (:weight light)))
   "title face in elfeed show buffer"
   :group 'elfeed)
  (set-face-attribute 'elfeed-search-title-face nil
                     :foreground 'nil
                      :weight 'light)
  (defadvice! +rss-elfeed-wrap-h-nicer ()
   "Enhances an elfeed entry's readability by wrapping it to a width of
`fill-column' and centering it with `visual-fill-column-mode'."
    :override #'+rss-elfeed-wrap-h
    (setq-local truncate-lines nil
                shr-width 140
                visual-fill-column-center-text t
               default-text-properties '(line-height 1.2))
    (let ((inhibit-read-only t)
          (inhibit-modification-hooks t))
       (setq-local shr-current-font '(:family "Lato" :height 1.2))
      (set-buffer-modified-p nil)))
```

```
(defun +rss/elfeed-search-print-entry (entry)
 "Print ENTRY to the buffer."
 (let* ((elfeed-goodies/tag-column-width 40)
         (elfeed-goodies/feed-source-column-width 30)
         (title (or (elfeed-meta entry :title) (elfeed-entry-title entry) ""))
         (title-faces (elfeed-search--faces (elfeed-entry-tags entry)))
         (feed (elfeed-entry-feed entry))
         (feed-title
         (when feed
            (or (elfeed-meta feed :title) (elfeed-feed-title feed))))
         (tags (mapcar #'symbol-name (elfeed-entry-tags entry)))
         (tags-str (concat (mapconcat 'identity tags ",")))
         (title-width (- (window-width) elfeed-goodies/feed-source-column-width
                         elfeed-goodies/tag-column-width 4))
         (tag-column (elfeed-format-column
                      tags-str (elfeed-clamp (length tags-str)
                                             elfeed-goodies/tag-column-width
                                             elfeed-goodies/tag-column-width)
                      :left))
         (feed-column (elfeed-format-column
                       feed-title (elfeed-clamp elfeed-goodies/feed-source-column-width
                                                elfeed-goodies/feed-source-column-width
                                                elfeed-goodies/feed-source-column-width)
                       :left)))
    (insert (propertize feed-column 'face 'elfeed-search-feed-face) " ")
    (insert (propertize tag-column 'face 'elfeed-search-tag-face) " ")
    (insert (propertize title 'face title-faces 'kbd-help title))
    (setq-local line-spacing 0.2)))
(defun +rss/elfeed-show-refresh--better-style ()
  "Update the buffer to match the selected entry, using a mail-style."
  (interactive)
  (let* ((inhibit-read-only t)
         (title (elfeed-entry-title elfeed-show-entry))
         (date (seconds-to-time (elfeed-entry-date elfeed-show-entry)))
         (author (elfeed-meta elfeed-show-entry :author))
         (link (elfeed-entry-link elfeed-show-entry))
         (tags (elfeed-entry-tags elfeed-show-entry))
         (tagsstr (mapconcat #'symbol-name tags ", "))
         (nicedate (format-time-string "%a, %e %b %Y %T %Z" date))
         (content (elfeed-deref (elfeed-entry-content elfeed-show-entry)))
         (type (elfeed-entry-content-type elfeed-show-entry))
         (feed (elfeed-entry-feed elfeed-show-entry))
         (feed-title (elfeed-feed-title feed))
         (base (and feed (elfeed-compute-base (elfeed-feed-url feed)))))
    (erase-buffer)
    (insert "\n")
    (insert (format "%s\n\n" (propertize title 'face 'elfeed-show-title-face)))
    (insert (format "%s\t" (propertize feed-title 'face 'elfeed-search-feed-face)))
```

```
(when (and author elfeed-show-entry-author)
  (insert (format "%s\n" (propertize author 'face 'elfeed-show-author-face))))
(insert \ (format \ "\%s\n\n" \ (propertize \ nicedate \ 'face \ 'elfeed-log-date-face)))\\
(when tags
 (insert (format "%s\n"
                  (propertize tagsstr 'face 'elfeed-search-tag-face))))
;; (insert (propertize "Link: " 'face 'message-header-name))
;; (elfeed-insert-link link link)
;; (insert "\n")
(cl-loop for enclosure in (elfeed-entry-enclosures elfeed-show-entry)
         do (insert (propertize "Enclosure: " 'face 'message-header-name))
         do (elfeed-insert-link (car enclosure))
        do (insert "\n"))
(insert "\n")
(if content
    (if (eq type 'html)
       (elfeed-insert-html content base)
      (insert content))
  (insert (propertize "(empty)\n" 'face 'italic)))
(goto-char (point-min))))
```