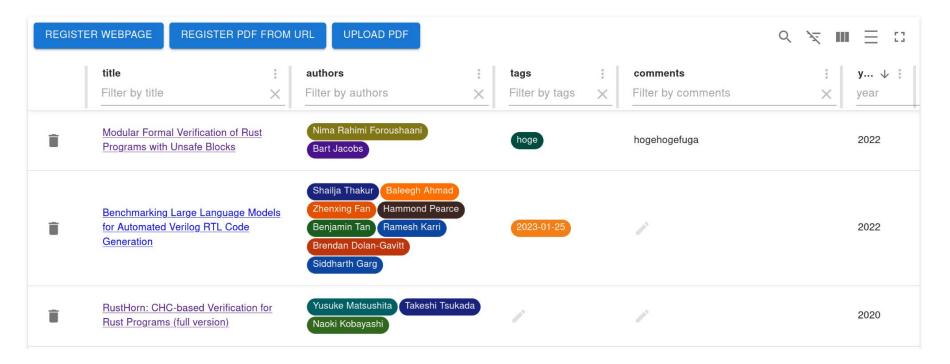
文書管理ソフトウェアを作った話

Akira Kawata https://akawashiro.github.io/

2023/02/16 KMC 例会講座

jendeley https://github.com/akawashiro/jendeley



プログラミングに関する文書が多様すぎる

- プログラミング言語のリファレンス
- ソフトウェアのソースコード
- ハードウェアの仕様書
- Stack Overflow
- 論文



Deep Residual Learning for Image Recognition

Kaiming He Xiangyu Zhang Shaoqing Ren Jian Sun Microsoft Research

/kahe syrianur syshen iimman\filmicrosoft.com

Deeper neural networks are more difficult to train. We of networks that are substantially deeper share those used processards. We explicitly reference to the deeper as learn-ing residual functions with reference to the deeper aspact, in-tended of Learning unsofference distriction. We previde com-positionizing employees distriction, the previde com-positionizing employees of the employees of the three residual networks are useful to optivity, and easy gain excessory from considerably increased deepit. On the Josephire districts to considerably increased deepit, On the Josephire districts to employee and the employee of the employee of the employees. deeper than VGG nets [41] but still having lower complexts. An ensemble of these residual nets orbitates 1.57% error on the ImageNet test set. This result seen the 1st place on the on the Issagellet test are. This result won the Isrplace on the ILSPIC 2015 classification in the We the preserves analysis on CIPA-10 with 100 and 1000 layers. The depth of propermatation is of central happortance for some simul recognition tasts. Solely due to our ex-traordy deep representations, we obtain a 20% relative to provenesses on the COCO object electrics disaster. Deep

esidual netr are foundations of our submissions to ILSVIX. dt COCO 2015 competitions², where we also won the 1st places on the tasks of ImageNet detection, ImageNet local-ization, COCO detection, and COCO responsition.

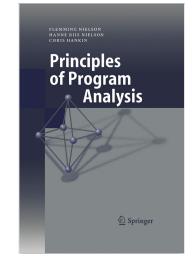
Deep convolutional neural networks [22, 23] have led to a series of breakfroughs for image classification [21, 50, 40]. Deep networks naturally integrate lootmichtigh-level features [50] and classifiers in an end-to-ord multi-layer fashion, and the "levels" of features can be enriched had found |W| = 0 a facility of W and W and W and W are supported by the W and W are supported by W and W are



Driven by the significance of depth, a question prises: I

learning better networks as easy as stacking more lavers An obstacle in answering this question was the motions problem of unishing/exploding gradients [1, 9], which hamper convergence from the beginning. This problem, however, has been largely addressed by committeed initial-ization [23, 9, 37, 33] and intermediate neutralization layers. [16], which make absorbed with itne of layers to start con-verging for stochastic gradient descent (SGD) with back-propagation [22].

When deeper networks are able to start conserving are cover, as reported in [11, 42] and thoroughly verified by



文書を整理したい

- 多様な形式の文書を扱いたい
- タグを使って分類したい
- コメントを書きたい
- 検索、情報処理したい
 - データベースがテキストファイルであってほしい
- 長期的に保存したい
 - 10年単位で保存したい
 - ローカルで動いてほしい
 - ウェブサービスは不可
 - 自分で保守したい
- クロスプラットホームで動いてほしい

既存のソフトウェア

- Zotero, Paperpile, Mendeley
 - 多様な形式の文書 => 🙅
 - データベースがテキストファイル =>
 - ローカルでの動作 => 🙅
 - 自分で保守 => 🙅
- JabRef
 - 多様な形式の文書 => 🙅
 - データベースがテキストファイル => ?
 - ローカルでの動作 => 🙆
 - 自分で保守 => ?

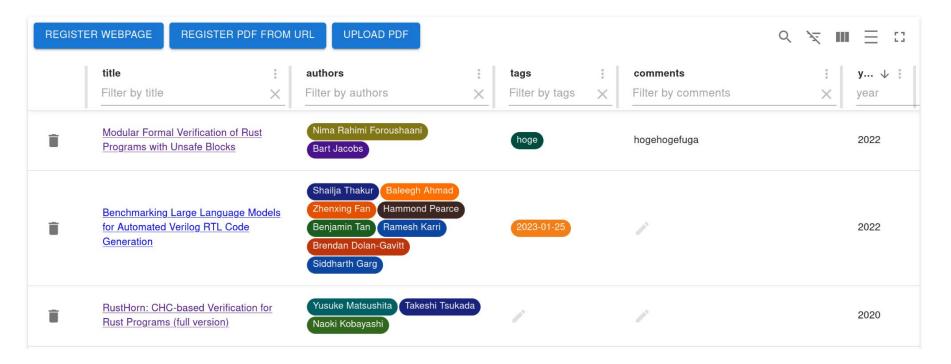
zotero







jendeleyを作りました!



使ってみてください

```
npm install @a_kawashiro/jendeley -g
jendeley scan --papers_dir <YOUR PDFs DIR>
jendeley launch --db <YOUR PDFs DIR>/jendeley_db.json
```

- npm: https://www.npmjs.com/package/@a_kawashiro/jendeley
- Github: https://github.com/akawashiro/jendeley
- ドキュメント: https://akawashiro.github.io/jendeley/
- 紹介記事 https://zenn.dev/a_kawashiro/articles/a2170f967f9508
- Hacker News: https://news.ycombinator.com/item?id=34747285

-E

データベースの中身

```
> cat ~/Dropbox/papers/jendeley_db.json | head -n 15
 "jendeley_meta": {
  "idType": "meta",
  "version": "0.0.18"
 },
 "doi_10.1145/1122445.1122456": {
  "path": [
     "A Comprehensive Survey of Neural Architecture Search.pdf"
  ],
   "idType": "doi",
   "tags": [],
   "comments": "",
   "dataFromCrossref": {
     "indexed": {
       "date-parts": [
```

jendeleyの機能

- 多様な形式の文書 => 🙆 PDFもしくはウェブページなら何でもOK
- データベースがテキストファイル => 🙆 JSON
- ローカルでの動作 => ◎ 完全ローカルで動作
- 自分で保守 => 貸が作りました
- クロスプラットホーム => <mark>⑥</mark> Windows/Linuxで毎日使っています ○ Dropboxでデータベースを同期

jendeleyの実装

ウェブサービスをローカルで動かすような作りになっている

- Frontend
 - React + Material React Table + MUI
- Backend
 - Express

お願い

https://github.com/akawashiro/jendeley にスターしてください

