Data Engineering

Blake Vente

free hosting

- free hosting
- no fine print

- free hosting
- no fine print
- familiar

- free hosting
- no fine print
- familiar
- easy to maintain

- free hosting
- no fine print
- familiar
- easy to maintain
- mobile friendly

- free hosting
- no fine print
- familiar
- easy to maintain
- mobile friendly
- Screen-Reader Friendly (accessibility)

Github-centered Workflow

GitHub Pages

Github-centered Workflow

- GitHub Pages
- GitHub Markdown

Github-centered Workflow

- GitHub Pages
- GitHub Markdown
- Open Source

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GitHub Markdown

superset of HTML

Github-centered Workflow

- GitHub Pages
- GitHub Markdown
- Open Source

- superset of HTML
- reduces our maintenence complexity

Inter-Op

Losslessly convert between HTML and Markdown using Pandoc

_posts/labs/ stores the labs

- _posts/labs/ stores the labs
- _posts/readings/ stores the readings

- _posts/labs/ stores the labs
- _posts/readings/ stores the readings
- etc...

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- etc...
- Push to master...

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- _ posts/readings/ stores the readings
- etc...
- Push to master...
- Everything autopopulates in 5 minutes or less.

Im2Latex Model

Upgrading

Ported model to Python 3¹

 $^{^{1}\}mathsf{https://github.com/untrix/im2latex}$

Im2Latex Model

Upgrading

- Ported model to Python 3¹
- Future plans to upgrade Tensorflow to v2

 $^{^{1}} https://github.com/untrix/im2 latex \\$

Im2Latex Model

Upgrading

- Ported model to Python 3¹
- Future plans to upgrade Tensorflow to v2
- Deal with deprecated dependencies

¹https://github.com/untrix/im2latex

Training model

 Model has been deployed on a Google-Cloud GPU learner and locally for consistency

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Following Upgrades to Model

 Be able to tweak the attention model and customizable hyperparameters of the model

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- Be able to tweak the attention model and customizable hyperparameters of the model
- Upgrade preprocessing scripts to work on Blake's generated data for consistency

Training model

- Model has been deployed on a Google-Cloud GPU learner and locally for consistency
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- Be able to tweak the attention model and customizable hyperparameters of the model
- Upgrade preprocessing scripts to work on Blake's generated data for consistency
- Experiment with running the model on various data categories (i.e Matrices, Equations, Piecewise Functions)

Additional Documentation

Setting up a Jekyll site with GitHub Pages²

 $^{^2 {\}sf https://jekyllrb.com/docs/github-pages/}$