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torchapp: A wrapper for fastai projects to create easy command-line inferfaces and manage hyper-parameter tuning.

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Software

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Summary

torchapp is a tool for jumpstarting the creation of deep learning projects with fastai (**info11020108?**), (J. Howard & Gugger, 2020) and allows for easy command-line interfaces and hyper-parameter tuning.

Statement of need

fastai allows for simple creation of world-class deep learning models. Designed for an interactive notebook environment.

Most machine learning models never go into production [https://venturebeat.com/2019/07/19/why-do-87-of-data-science-projects-never-make-it-into-production/]

Typer

App Development

(Jeremy Howard & Gugger, 2020)

Experiment Tracking and Hyper-parameter Tuning

Already integration with W&B and fastai. Weights and Biases (Biewald, 2020)

Project Generation

Cookiecutter. Testing and documentation

Acknowledgements

References

Biewald, L. (2020). *Experiment tracking with weights and biases*. https://www.wandb.com/

Howard, J., & Gugger, S. (2020). *Deep Learning for Coders with Fastai and Pytorch: AI Applications Without a PhD*. O'Reilly Media, Incorporated. ISBN: 9781492045526

Howard, Jeremy, & Gugger, S. (2020). Fastai: A Layered API for Deep Learning. *Information*, *11*(2). https://doi.org/10.3390/info11020108