

DOI: [10.xxxxxx/draft](https://doi.org/10.xxxxxx/draft)

Software

- [Review](#) ↗
- [Repository](#) ↗
- [Archive](#) ↗

Editor: [Open Journals](#) ↗

Reviewers:

- [@openjournals](#)

Submitted: 01 January 1970

Published: unpublished

License

Authors of papers retain copyright
and release the work under a
Creative Commons Attribution 4.0
International License ([CC BY 4.0](#)).

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

Robert Turnbull ¹

¹ Melbourne Data Analytics Platform, University of Melbourne

Summary

torchapp is a tool for jumpstarting the creation of deep learning projects with fastai
([info110201087](#)), (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/>]

Typers

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

- ²⁷ Howard, Jeremy, & Gugger, S. (2020). Fastai: A Layered API for Deep Learning. *Information*,
²⁸ 11(2). <https://doi.org/10.3390/info11020108>

DRAFT