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#### Software

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

4 Robert Turnbull <sup>1</sup>

5 <sup>1</sup> Melbourne Data Analytics Platform, University of Melbourne

## 6 Summary

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

## 10 Statement of need

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

13 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/](https://venturebeat.com/2019/07/19/why-do-87-of-data-science-projects-never-make-it-into-production/)]

14 Typer

## 16 App Development

17 ([Jeremy Howard & Gugger, 2020](#))

## 18 Experiment Tracking and Hyper-parameter Tuning

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

## 20 Project Generation

21 Cookiecutter. Testing and documentation

## 22 Acknowledgements

## 23 References

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

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

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

DRAFT