TorchJD: Jacobian Descent in PyTorch

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GitHub
github.com/SimplexLab/TorchJD

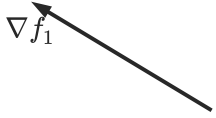
TorchJD
torchjd.org

arXiv
arxiv.org/pdf/2406.16232

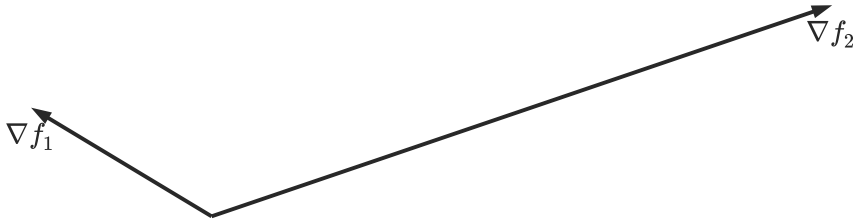
Motivation

Jacobian descent

Jacobian descent



Jacobian descent



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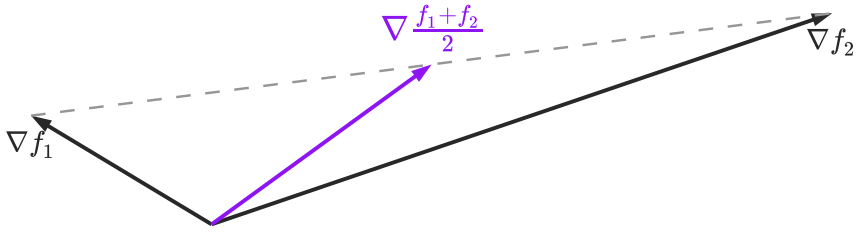

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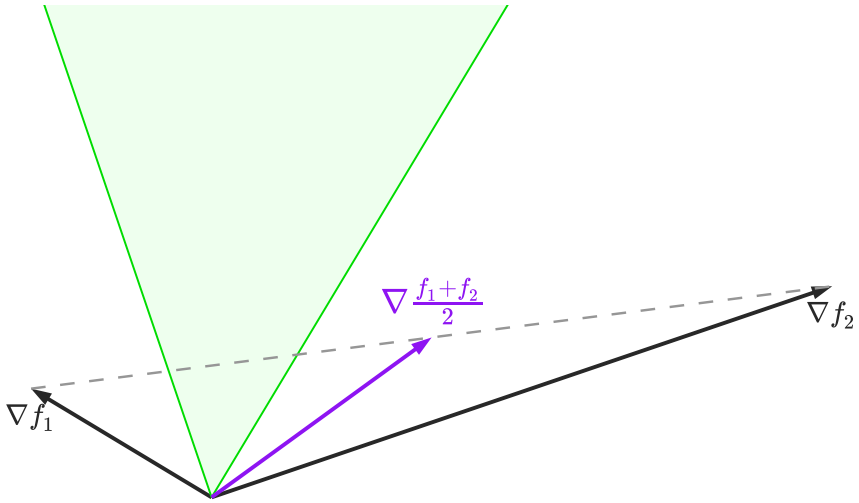

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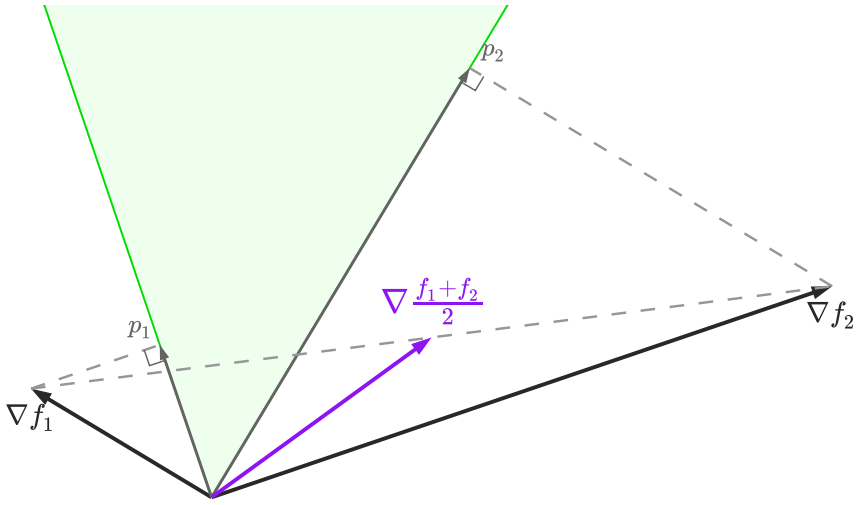

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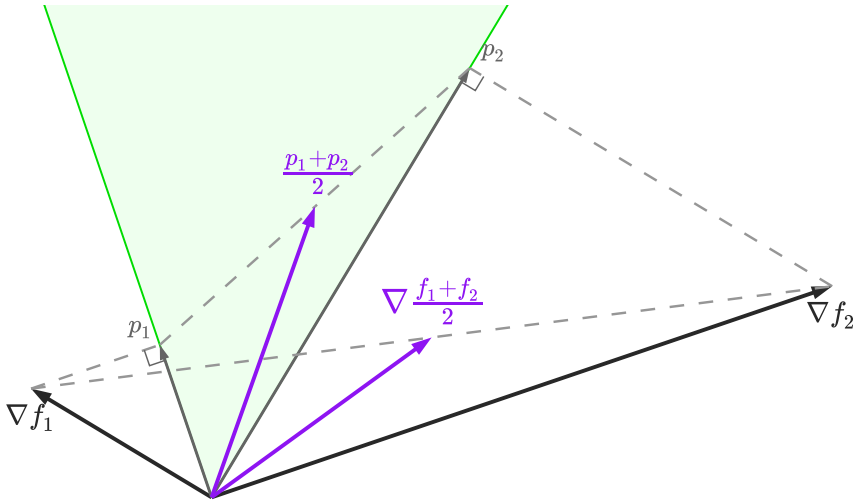

TorchJD

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`torchjd`	`autojac.jac_to_grad`	aggregate `.jac` fields into `.grad`

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  optimizer.step()
  optimizer.zero_grad()
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Discussion