

ALCHEMY

WITH FRIENDS

How to play (minimum 4 players)

1. Set the black and white decks face down on the table.
2. Nominate someone to be the first 'dealer'.
3. Deal each player 10 white cards.
4. Dealer picks up the top black card and reads it out.
5. Everyone except the dealer picks the white card(s) from their hand which they think will be the funniest in combination with the black card.
6. They place these face down on the table in a pile.
7. The dealer then shuffles them and reads them out loud.
8. The dealer then picks the funniest white card and whoever submitted the winning card(es) keeps the black card.
9. The dealer responsibility moves in a clockwise order and the game continues as above.
10. When you have had enough of playing, the player with the most black cards wins.

Schmidhuber

Mode collapse

Saddle points

Reviewer #2

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Being scooped

Blockchain

Alchemy

Real science

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Rigor police

My NeurIPS paper

Being a true
Bayesian

A debate about
PyTorch vs
TensorFlow

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Dropout

Adding skip
connections

@ML_Hipster

Tweeting @
BoredYannLecun

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Spending time on
/r/ML

Saying how much
better NeurIPS was
in the old days

Debating when
the singularity will
happen

#FeelTheLearn

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Testing on the
training set

AGI

Not trying the linear
baseline

Hyperparameter
optimisation
(including the
random seed)

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Reducing internal
covariate shift

Vacuous
generalization
bounds

152 deep layers

Exploding gradients

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Procrastinating while
waiting for my GPU
jobs to complete

Temporally recurrent
optimal learning

Self-attention

Gradient noise

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Collecting cool swag
at NeurIPS

Talking to AI
recruiters

Grad student
descent

Not plotting error
bars

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Meta-meta learning

Adversaries, bandits,
and critics

Carefully decaying
the learning rate
until it works

Nature and Science
papers

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Minimum innovation
for maximum impact

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Citing the Canadian
mafia

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#RocketAI

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Waiting for the
winter to come

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Fixing random seeds

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Comparing to
random search

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Ignoring the rebuttal
period

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Putting it on arXiv
first

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Montezuma's
Revenge

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Simpson's paradox

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Using -999 to
encode a missing
value

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Outlier removal

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Restricted
Boltzmann machines

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Gaining half a
percent accuracy on
CIFAR-10

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Some trivial data
pre-processing

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The minimal viable
product

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Sending complaint emails to the personal email address of the area chair

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Approximating AIXI

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My AI start-up

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Buying my NeurIPS registration on the darknet

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Occam's Razor

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Bits back

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GPU compute

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A weak classifier

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Machine Learning
Yearning

Causal leakage

Overfitting

Biased data
collection

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Data visualization

A bag of bootstraps

Hand-coded
features

NeurIPS registration
queues

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VC funding

Inductive biases

Optimizing on the
test set

Shrinkage

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Random kitchen
sinks

Selecting k in
 k -means

Getting away with
not reporting
runtimes in your
paper

Submitting your
paper to a double-
blind conference
and arXiv at the
same time

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Asking the author to cite five of your papers in your anonymous review

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An insufficient literature review

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Finding a bug in your code after submitting your paper

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$p < .05$

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Cherry picking results

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Bugs as regularizers

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Sharing a single GPU with your labmates

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Hacking the NeurIPS style file

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Flattering likely reviewers in the background work section

The importance of convexity

Local optima

Random restarts

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Early stopping

Gradient descent on the validation set

Using sudo to remove other people's GPU lock

A reproducibility crisis

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Classifying MNIST
digit 2 vs 9

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Vapnik's principle

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Software 2.0

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Writing neural
networks in Lua

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Doing
backpropagation
manually in numpy

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Ignoring ancient
works pre-2015

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Referring to work as
AI rather than ML

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Worrying that your
data is not big
enough

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Discussion of the growth in NeurIPS attendees

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Trying to shoehorn any problem through a ResNet

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Einsum

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Trying to come up with a catchy name for a new model

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Writing a paper on the day of the deadline because you finally beat the random baseline

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What conversational agents gossip with each other

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Competing with robots in an automated warehouse

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Hiring mechanical Turk workers to tune the hyperparameters of your RL agent

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Novel evaluation
metric

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Math to look smart

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Understand the bug
that made it work

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A conversational
agent's social media
addiction

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$$P(B|A) = \frac{p(A|B)p(B)}{p(A)}$$

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import torch

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_____ should be trivial to implement.

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_____ is left as an exercise for the reader.

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I'm too important for _____.

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PhD students these days have no respect for _____.

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PhD advisors these days have no respect for _____.

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ML is all about _____.

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When I grow up, I will work on _____.

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The new review process optimizes for _____.

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I had the time of my life solving problems with _____.

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Blood, sweat, and _____.

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My supervisor could not respond to my email because apparently _____.

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I can't believe I had a paper with _____ accepted at NeurIPS.

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Hey kids, study ML and one day you too can aspire to work on _____.

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_____ is a slippery slope that leads to _____.

2 Pick two cards!

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I finally experienced _____ and now I understand _____.

2 Pick two cards!

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Self-Attention is so 2018. 2019 is all about _____.

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When I sell my AI start-up, I will erect a 20ft statue to commemorate _____.

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I told the AI recruiter I focus on _____.

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Reviewer 2 rejected the paper because of _____.

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The field of AI is stuck until we understand _____.

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During my PhD I focused too much on _____.

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During my PhD my supervisor focused too much on _____.

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_____ explains how the brain works.

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_____ is the new electricity.

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_____ is all you
need.

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_____ is a real
ethical concern.

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Being Bayesian
about _____
would solve all your
problems.

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Neural _____
models are the next
big thing.

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"Science is _____.
Religion is _____."

- Alan Turing

2 Pick two cards!

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"The development
of _____ could
spell the end of the
human race."

- Stephen Hawking

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When I grow up I'm
going to work at
Microsoft.

Microsoft is looking for machine
learning experts and we want you.

To find out more visit:
aka.ms/neurips-2018

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