



Industrial Applications of Reinforcement Learning

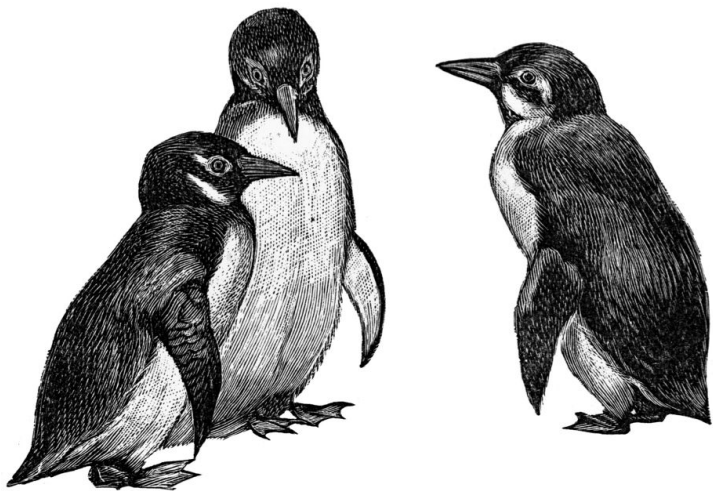
Phil Winder
CEO Winder Research

<https://WinderResearch.com>

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Reinforcement Learning

Industrial Applications of Intelligent Agents



Phil Winder, Ph.D.

rl-book.com



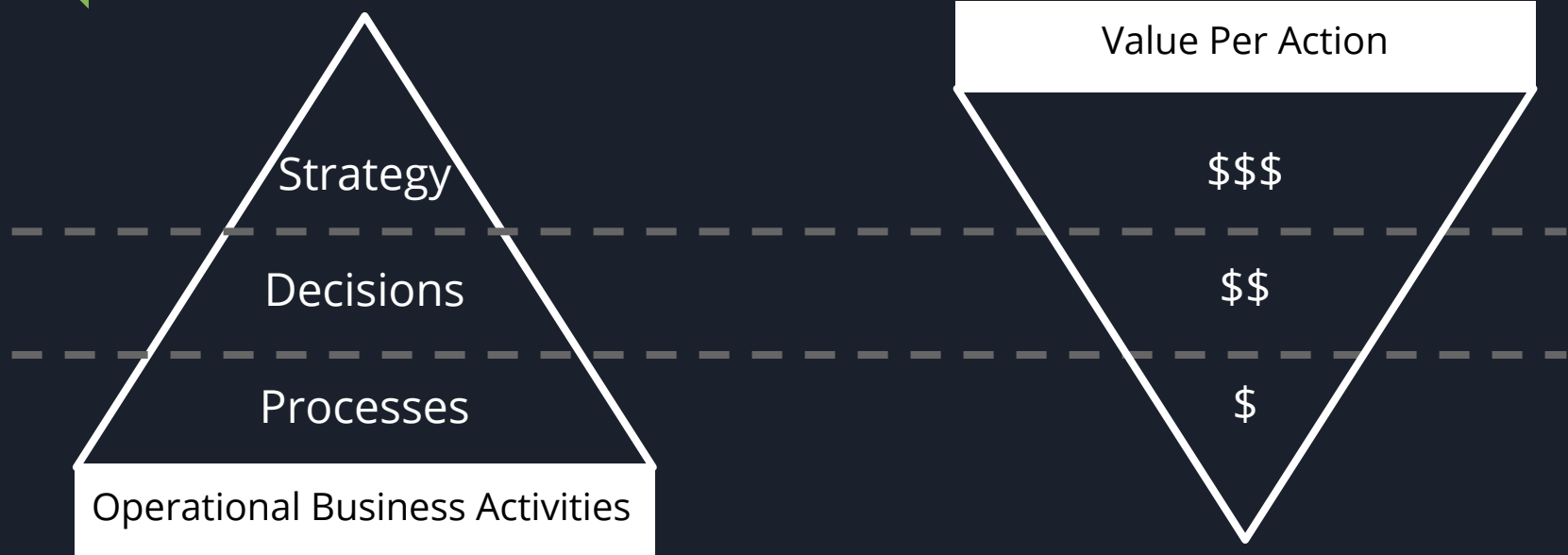




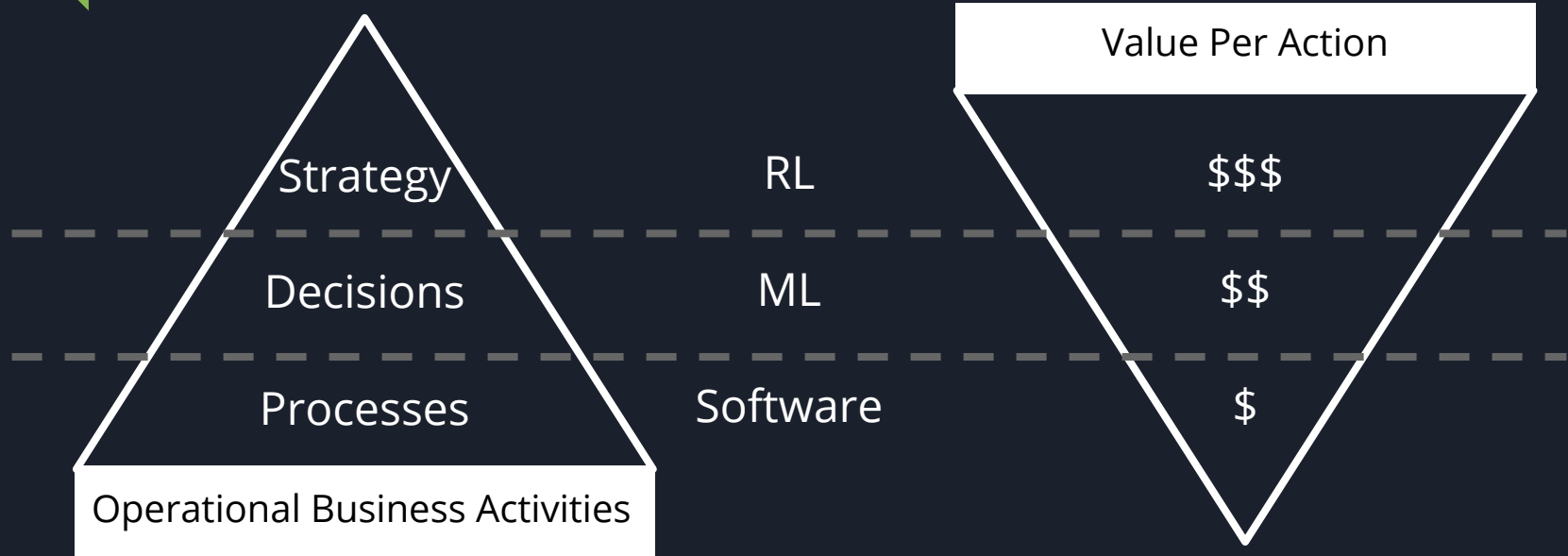
How can RL help?



How can RL help?



How can RL help?





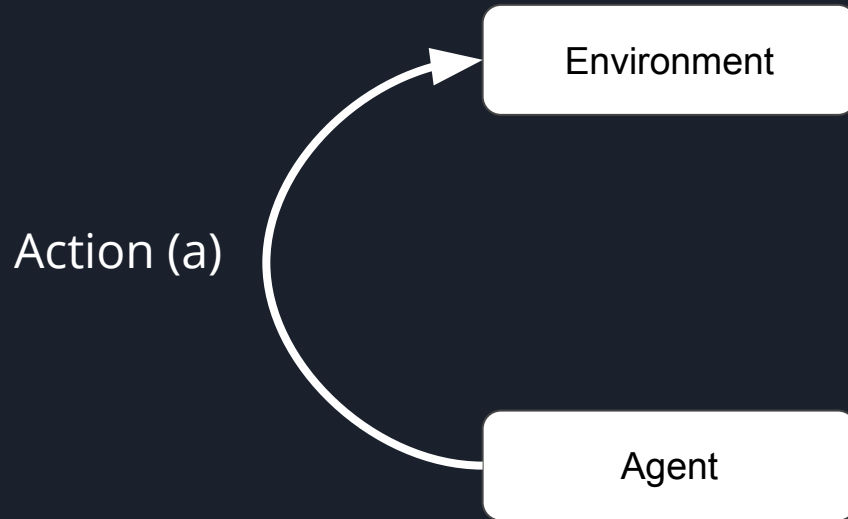
What do I need?

Environment

Agent

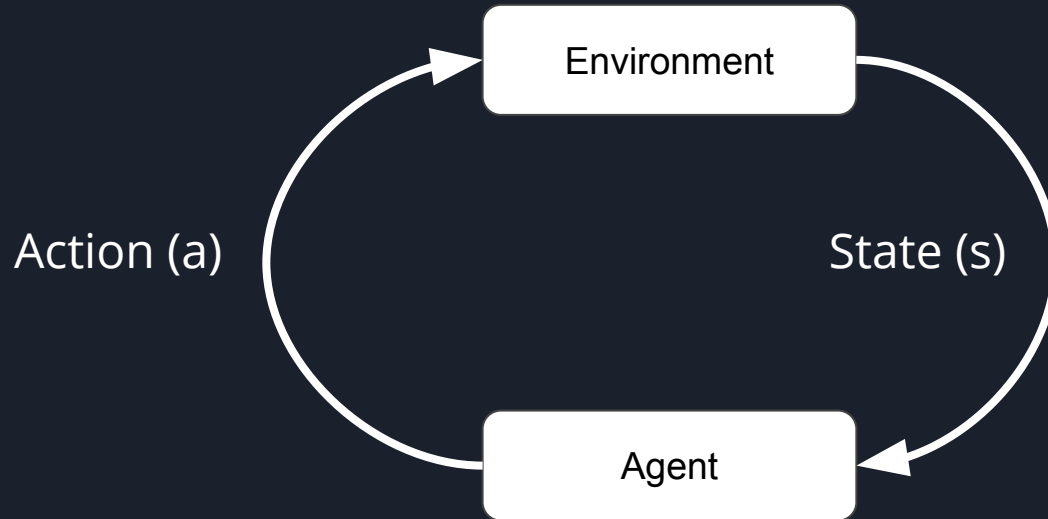


What do I need?

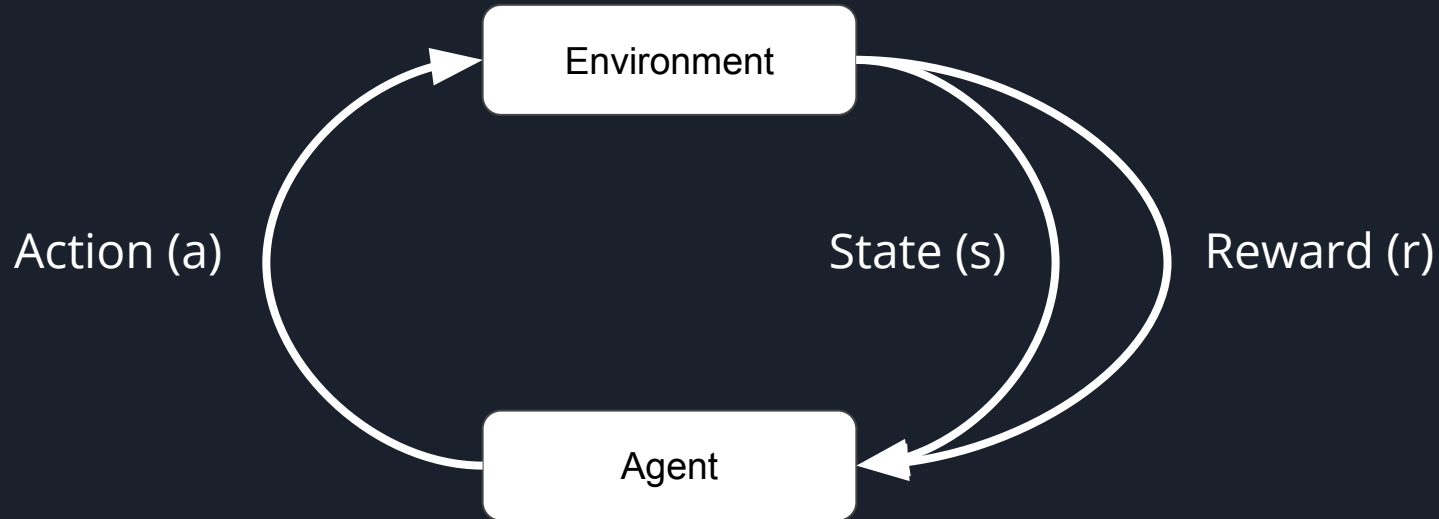




What do I need?



What do I need?



A Curated List of Reinforcement Learning Applications

The goal of this page is to help demonstrate that you can use reinforcement learning (RL) in your domain. There is more to RL than Atari games and robots. Filter by industry on the left or by clicking the use case tags underneath the application. Click on an application to view the abstract and view the source.

Industry

advertising

biology

business

ecommerce

energy

environment

finance

gaming

general

healthcare

iot

logistics

management

manufacturing

technology 2019

[Hierarchical Reinforcement Learning for Open-Domain Dialog](#)

chatbot

manufacturing 2020

[A Survey of Cybersecurity and Resilience of Digital Manufacturing](#)

cybersecurity survey

technology 2019

[Horizontal and Vertical Scaling of Container-Based Applications Using Reinforcement Learning](#)

cloud scheduling

technology 2018

[Reinforcement Learning on Web Interfaces Using Workflow-Guided Exploration](#)

web

technology 2019

[Reinforcement Learning Based Orchestration for Elastic Services](#)

cloud scheduling

technology 2017

[Automated Cloud Provisioning on AWS using Deep Reinforcement Learning](#)

cloud scheduling

technology 2017

[A Hierarchical Framework of Cloud Resource Allocation and Power Management Using Deep Reinforcement Learning](#)

cloud power scheduling

energy 2020

[Accelerated Deep Reinforcement Learning Based Load Shedding for Emergency Voltage Control](#)

electricity

energy 2018

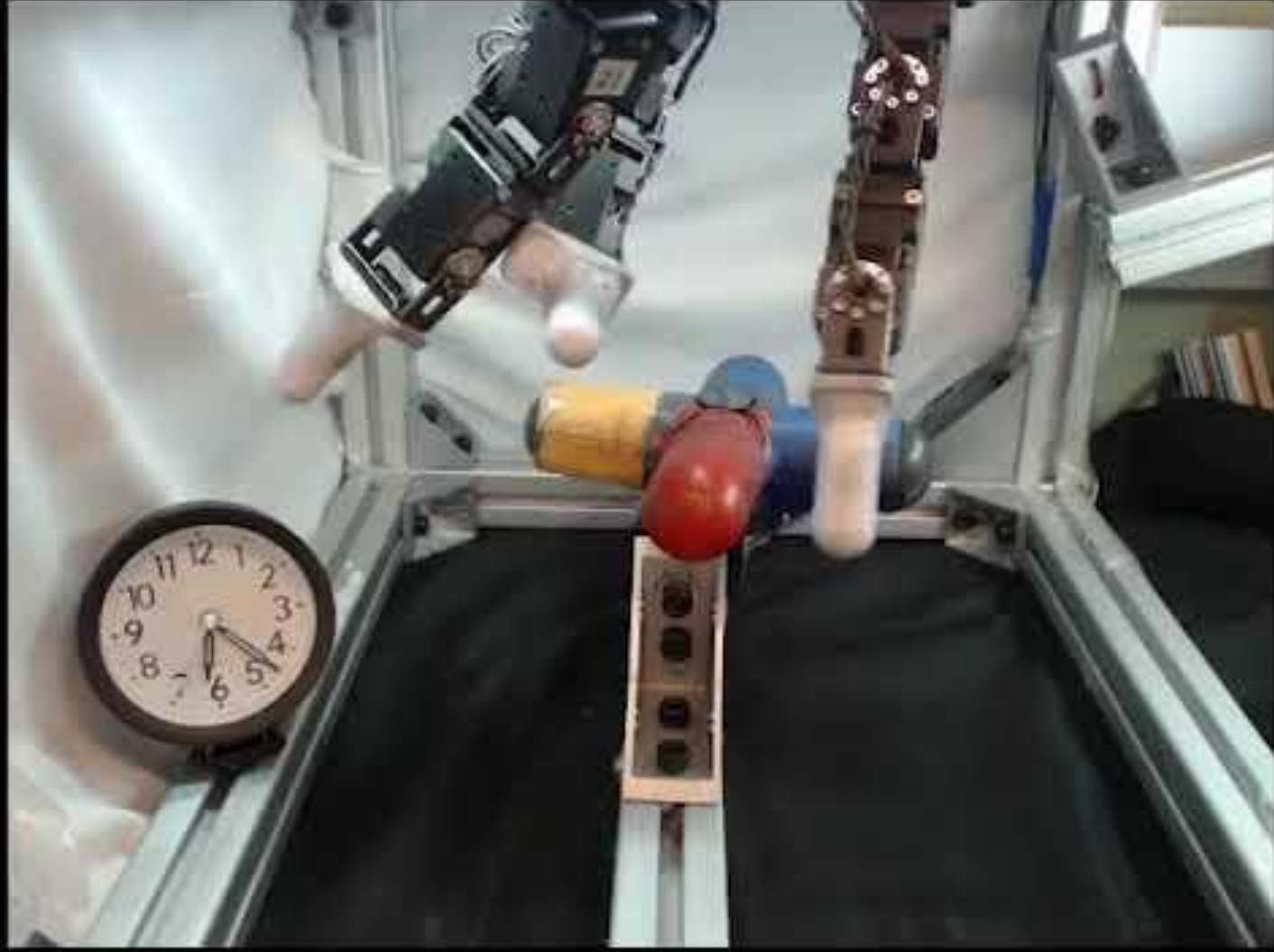
[Towards plug-and-play smart thermostats inspired by reinforcement learning](#)

thermostats

Manufacturing (i.e. Robotics)

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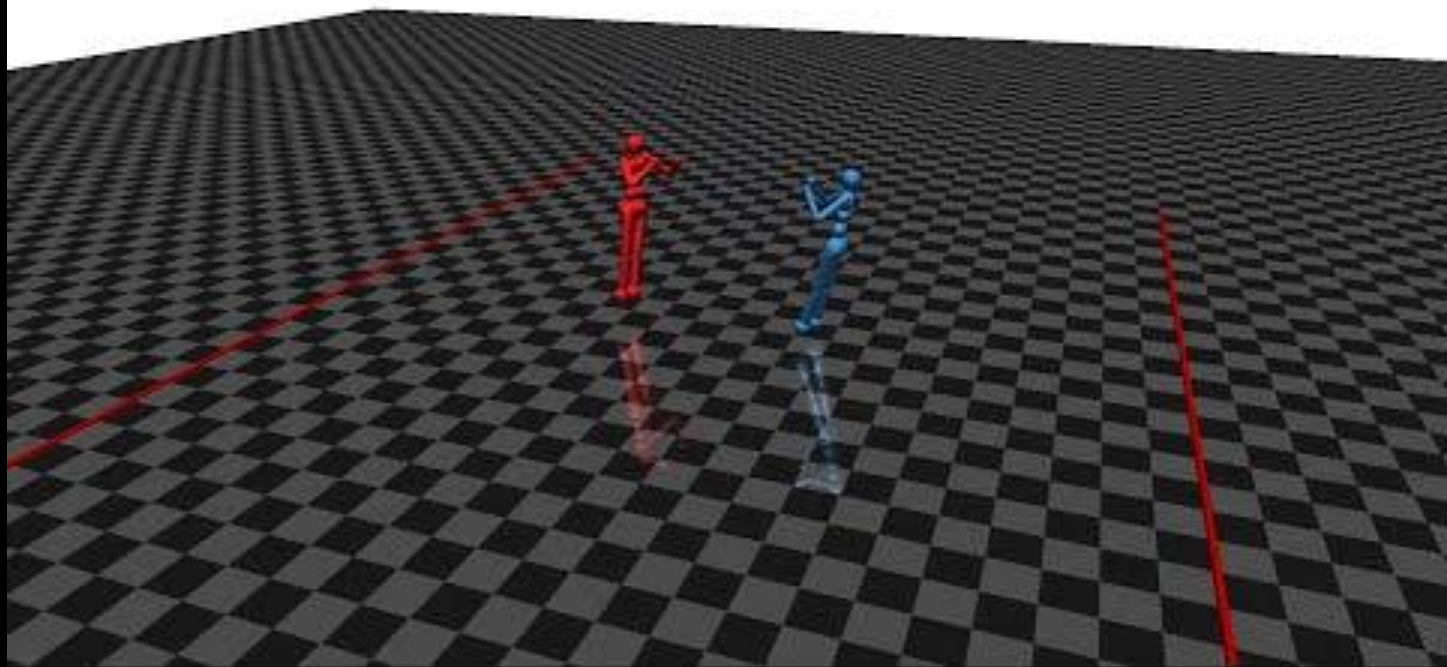




Opponent = 2
Adversary (Adv1)

Ties = 0

Victim = 1
Normal (ZooV1)

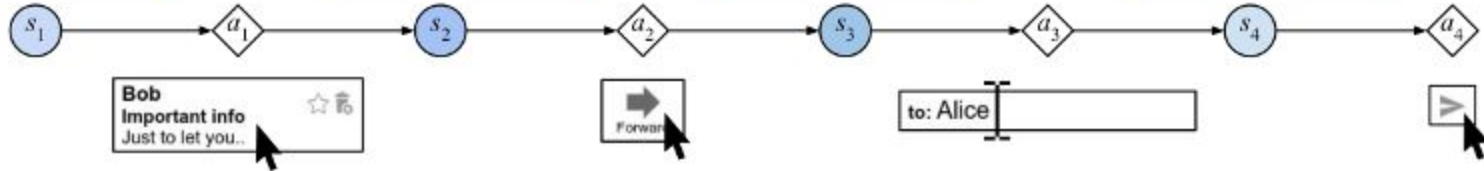
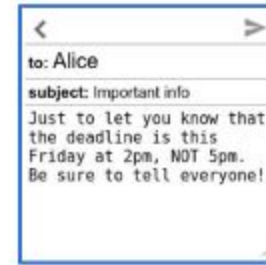


00:36:58
10x Speed

BERLIN, GERMANY
JAN 21, 2020

Tech

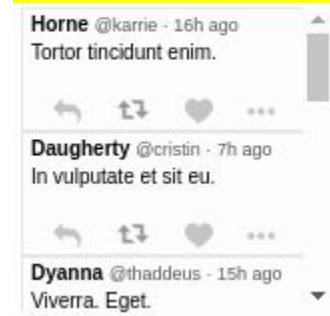
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Tell Anita I'll "Orci, sit magnis." in response to her email.



For the user @cristin, click on the "Report" button.



Transport

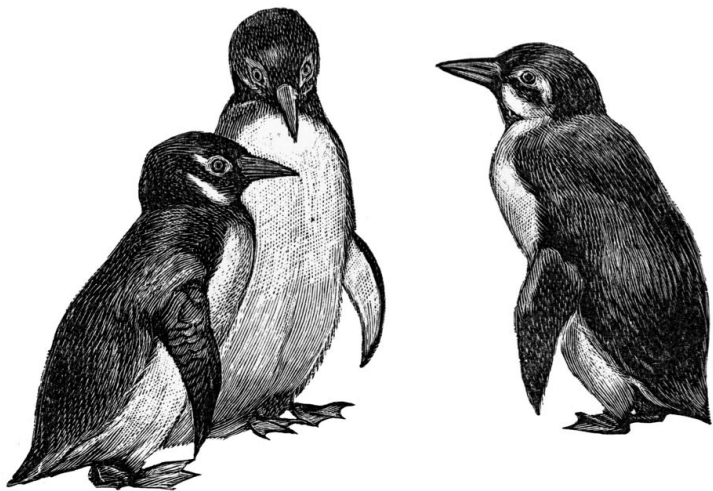
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Science
AAAS

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rl-book.com

✉ phil@WinderResearch.com

in DrPhilWinder

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References

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