## - ITI MOVEISE

OrigamiLeo

Volume 1
Alp action oritgai book Leonaedo Pelido Martinez

## BIT MOVESE CrigamiLeo



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See the video Album It moves

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 out of the hat

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Butterfly is a flapping flower



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dog


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BONOS: Rabbit in a hat Bookmark


## Sntroduction



This is another free book. The theme this time is action origami (action origami is my favorite).

Ötction origami has the unique feature that the model can move in some way when manipulated. The traditional example is the flappoing bird. It is a class of models which have movable parts. These incfude aff sorts of mechanisms with efements that sfide relative to each other, multipiece puzzles, and models which rely on paper's spring action for motion.

Befow $\mathscr{J}_{\text {jpresent to you some of my action origami models. They are }}$ mostly simple - intermediate fevef.

I hope that the mechanisms used to move the different modefs wiff inspire other creators to create their oun modefs, just as $\mathcal{I}$ have been inspired in some cases by famous models.





Inside reverse fold


Outside reverse fold


Rabbit ear fold



SIIT MOVESS:

From my point of view, creating moving models is much more difficult than any other type of origami. The challenge is double: On the one hand, it is necessary to ensure that the folded model is a recognizable representation of the real figure. Secondly, said model must be made to move a part according to the figure. Thus, the birds flap their wings, the frogs jump and the magical rabbits come out of the hat.

Then other drawbacks appear: folded models deteriorate over time and resin or other elements cannot be added to preserve them because they lose their essence (motion). In addition, the models do not work with all papers.

My way of creating this type of origami is to find a mechanism that allows the desired motion and then insert that mechanism into a base with which the desired model can be obtained.

Let's see two examples:

## Example 1: The ugly duckling wants to fly



The original idea was to start from a Bird Base that works very well for flapping birds: One head tip, one tail tip and 2 wing tips. The Bird Base must be modified a bit to give the desired bird shape.



Valley fold and turn over



This way we can give more detail to the head and wings.
(See pages 150-155)

## Example 2: Beckoning waving lucky dog



3


This base seemed very convenient for the model. You should only insert the action mechanism for it to move a hand.



The mechanism to move the hand works well, but I decided to add some paper to give volume to the hand.

(See pages 141-149)







16 B
Intermediate step




## Birdin money bafance






28
Mountain fold

Precrease and sink



(22.5 ${ }^{\circ}$ )






41
Valley folds



Square $20 \times 20 \mathrm{~cm}$


Precrease


Pinch on Edge




by Leonardo Pulldo Marlinez
by Leonardo Pulldo Maekinnez








Thin the arms

30
Precrease (Valley fold)

31
Precrease (Mountain fold)


34
Pressing as shown, Will open and close the mouth
$3 D$ shape the rest of model

## cher rroodjocher ofyec



Inspired by the model: "Barking Dog " by Paul Jackson




Whenjpigsfly


## BODY



Water bomb base
1

Fold by the marks





## ASSEMBLY



Flapping pig


1
Precrease diagonals



5
Precrease as show


by Leonardo Pulldo Marilinez




Fold by marks
Step 17
(mark again)


The card turns in a swan


Drinking obird





Repeat behind


Sink.
Repeat behind

25
Finished model


## To my angef upo afove



Square $20 \times 20 \mathrm{~cm}$ or
Square $25 \times 25 \mathrm{~cm}$


<

Precrease $22.5^{\circ}$



Fold behind




## FIV fast Sike humming bird






Sink and fold behind.
Repeat behind







## $+\mathrm{H}_{2} 4$

 - We eftisl my beating heart

Square $20 \times 20 \mathrm{~cm}$



1
Pre-crease the diagonals


5
Pre-crease $90^{\circ}$


4
Pre-crease $22.5^{\circ}$




## When devís speaks edt.







Finished model

## Ggafloping horse statue




1
Fold and unfold by diagonal













## How to fly your dragon 2









## There is no apoon, There is an orizuru



There is an orizuru Square $25 \times 25 \mathrm{~cm}$

There is no spoon
Rectangle $20 \times 10 \mathrm{~cm}$

There is no spoon $\bigcirc$










Fold as shown




45
Sink




## Puss a Little rabbit out of the hat



Square $25 \times 25 \mathrm{~cm}$





Outside reverse fold


23
Pre-crease



34
The rabbit appears. Turn over


37
Valley fold



46
It's magical: The rabbit has appeared




Start with a $8 \times 8$ grid







Finished model


39
The bunny appears and disappears

## -Butterfly is a flappoping flower







27
Butterfly is a flapping flower

# OBeckoning waving fucky dog 



Square $20 \times 20 \mathrm{~cm}$
Square $25 \times 25 \mathrm{~cm}$


1
Pre-crease the diagonals



Pinch in the middle of two marks


Repeat steps 2-4 in this corner




11
Pre-crease the new diagonal









58
Finished model


Finished model


60
Also salutes by holding on $A$ and pulling on $B$

Holding at A and pulling at $B$, the dog greets by waving the hand

## The ugly duckling wants to fly






31
Sink and outside reverse fold


## 




13 A
Pre-crease $45^{\circ}$

12
Pre-crease




Mark by internal reference and open sink in the two layers (outside reverse fold)


35 Valley fold.



## The fion who knew how to talk



Pre-crease the diagonals



7


Pre-crease
in mountain
 in mountain

13 Repeat

$$
12
$$



14
Fold by marks





Holding as shown at A and pushing the hind legs, the lion opens and closes its mouth

64
Also Works holding at B and lifting at $\mathbf{A}$


Other attoin sodels 5y tre uetor

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https://www.giladorigami.com/origamidatabase/Galloping+horse+and+rider+Leonardo\%2BPulido\%2BMartinez

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## Other <br> 5ock <br> 



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## - Fibfiography and 免eferences



- Juan Gimeno. Model: Baby bird.
https://www.giladorigami.com/origami-database/Bird+-+baby+Juan\%2BGimeno https://www.make-origami.com/BARF/babybird.pdf
- Paul Jackson. Model: Barking dog.
https://www.giladorigami.com/origami-database/Barking+dog+Paul\%2BJackson


## ACIION BOOKS

- Belinda Webster. Joe Fullman. Ation Origami: Paper Models That Snap, Bang, Fly and Spin!
https://www.barnesandnoble.com/w/action-origami-belindawebster/1137513925
- Jeremy Shafer. Origami Oh La La!

https://www.giladorigami.com/origami-database-book/2892/Origami-Ooh-La-La!-by-Jeremy-Shafer https://www.amazon.com/exec/obidos/ASIN/1456439642/giladsorigampage
- Jeremy Shafer. Origami Pop-ups to Amaze and Amuse.
https://www.giladorigami.com/origami-database-book/2649/Origami-Pop-ups-to-Amaze-and-Amuse-by-Jeremy-Shafer https://www.amazon.com/exec/obidos/ASIN/149429902X/giladsorigampage
- Jeremy Shafer. Origami to Astosnish and Amuse.
https://www.giladorigami.com/BO Astonish.html
https://www.amazon.com/exec/obidos/ASIN/0312254040/giladsorigampage
- Joe Fullman. Action Origami.
https://www.barnesandnoble.com/w/action-origami-joe-fullman/1122574413
- Nick Robinson. Origami on Motion
https://www.giladorigami.com/origami-database-book/3913/Origami-in-Motion-by-Nick-Robinson https://www.origami-shop.com/nick-robinsons-collection-origami-motion-xml2062649641248549 378-12148.html?ref=6\&affiliate banner id=1
- Nipon Origami Association. NOA Magazine 10 (Action models). https://www.giladorigami.com/origami-database-book/2559/NOA-Magazine-10
- Paul Jackson. Incredible Action Origami that really Works.
https://www.thriftbooks.com/w/actionorigami/8884249/\#edition=8142740\&idiq $=4016734$
- Paul Jackson. Origami Toys Taht Tumble, Fly and Spin. https://www.giladorigami.com/origami-database-book/2848/Origami-Toys-That-Tumble,-Fly-and-Spin-by-Paul-Jackson https://www.amazon.com/exec/obidos/ASIN/1423605241/giladsorigampage
- Rick Beech. Action Origami: Over 25 Animated paperfolding Projects. https://www.giladorigami.com/BO ActionOrigami.html https://www.amazon.com/Action-Origami-Animated-PaperfoldingProjects/dp/1842157086
- Robert J. Lang. Origami in Action.
https://www.giladorigami.com/origami-database-book/102/Origami-in-Action-by-Robert-J.-Lang https://www.amazon.com/exec/obidos/ASIN/0312156189/giladsorigampage


SITI MOVEIS:

## BON゚૭§:

## Kagbit in a Kat obiooknark



Square $15 \times 15 \mathrm{~cm}$
Whoto here





Turn over
$p$


Finished model
"Action models are a favorite of all levels of origami aficionados, and Leonardo Pulido Martínez shows off some novel and clever ideas in this collection. Included are illusions, along with the requisite pull and push here type mechanisms. Even the ubiquitous flapping bird gets a new twist as being connected to a bust of a person. Surely a fun assortment of projects."

Marc Kirschenbaum


Loonardo $\mathscr{P}$ uficto PRFartínaz $^{2}$

