

# GRIFFIN Progress Report

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V i s i o n

C o n t r o l

Universidad  
de Sevilla



# GRIFFIN Manipulation

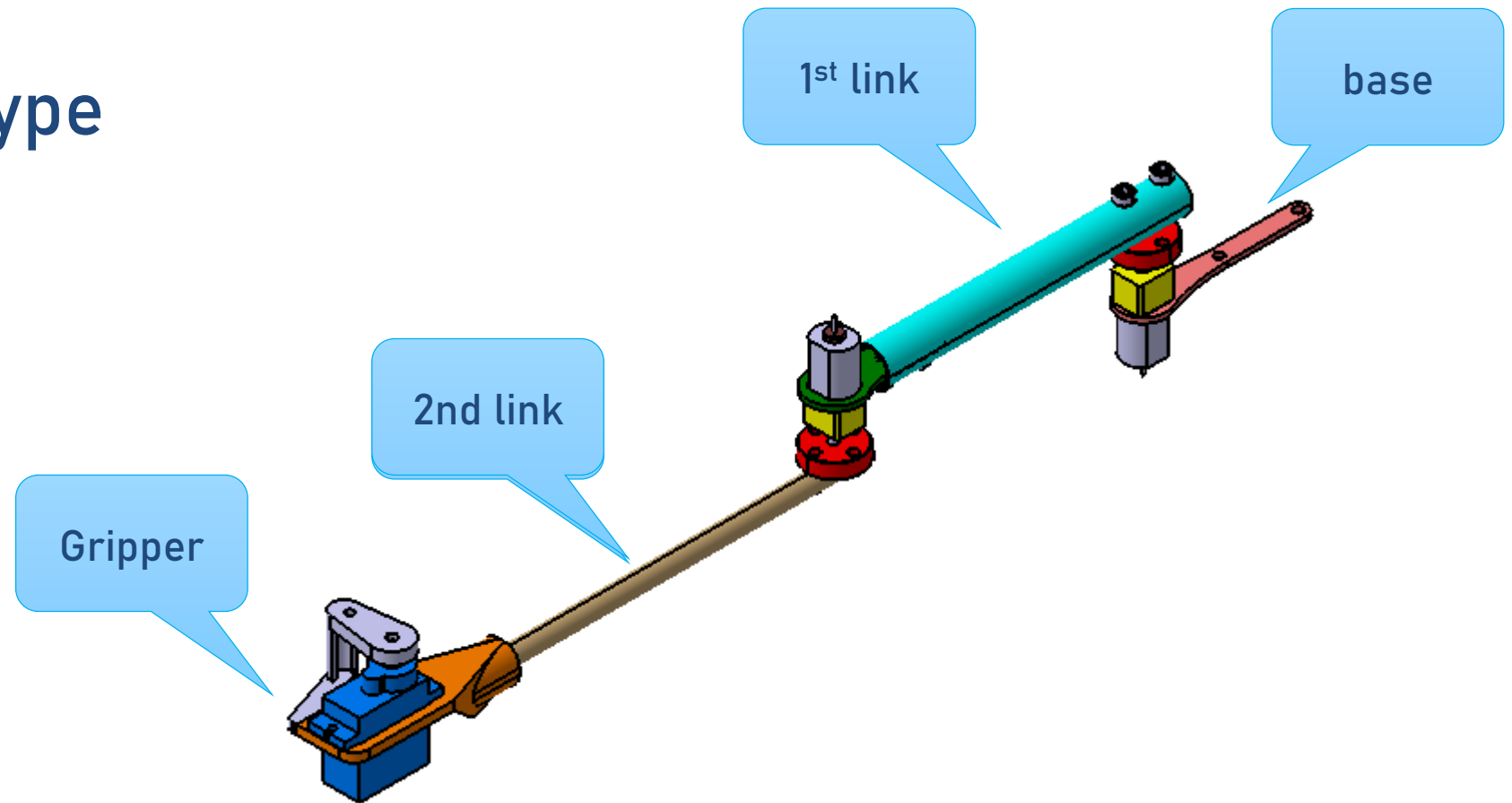
- Ultimate objective:
  - Design two sets of two cooperative manipulators
  - Installed on two birds
  - One bird handling something to the other
  - **Decide on a meaningful scenario (needed)**
  - **Cooperation (needed)**

# GRIFFIN Manipulation

- First step:
  - Design a two-DoF arm
  - Lightweight
  - With relatively large workspace
  - Using carbon-fiber as much as possible

# GRIFFIN Manipulation

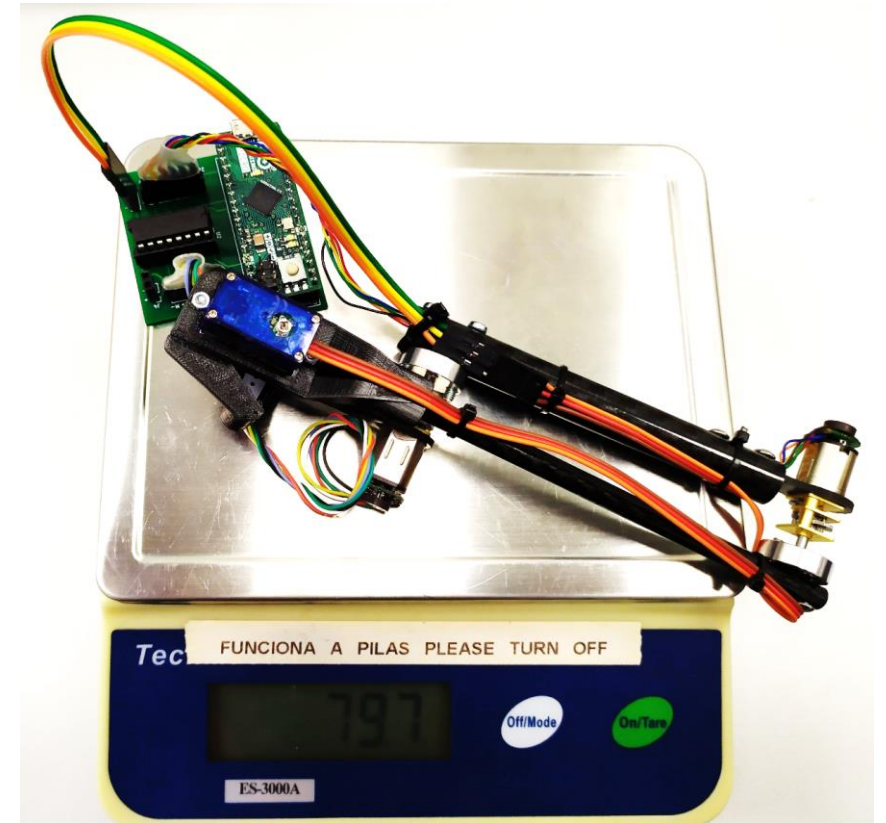
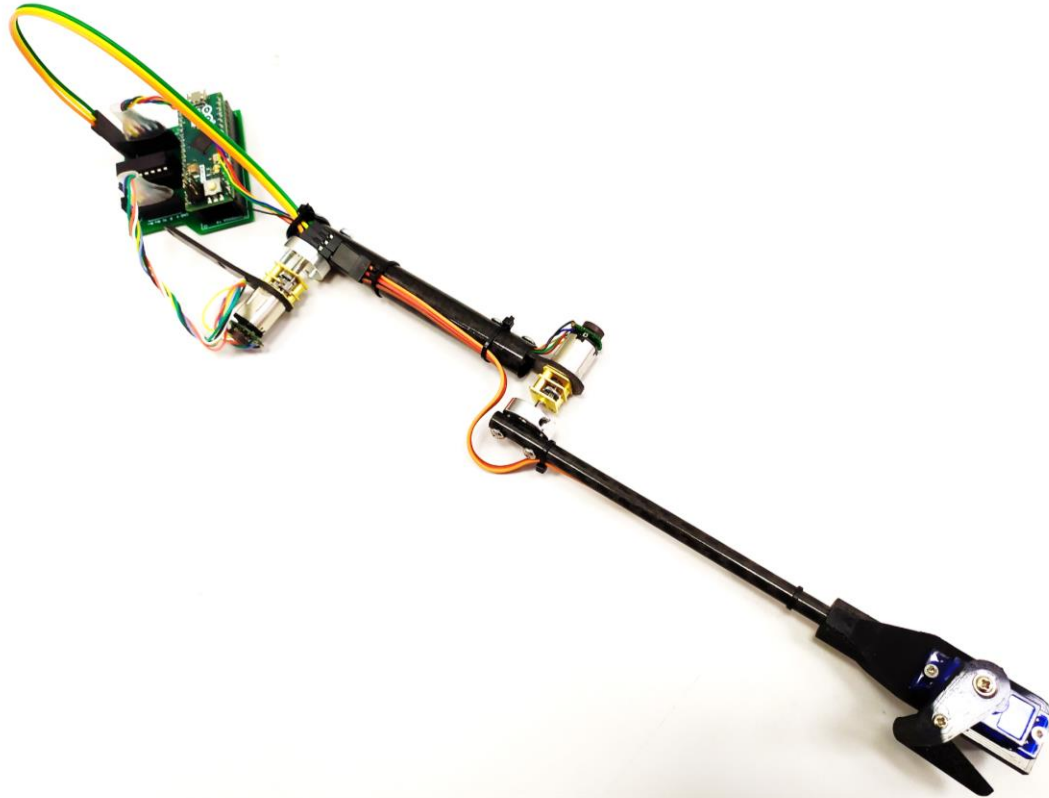
- The first prototype



In collaboration with Daniel Feliu Talegón, and José Ángel Acosta

# GRIFFIN Manipulation

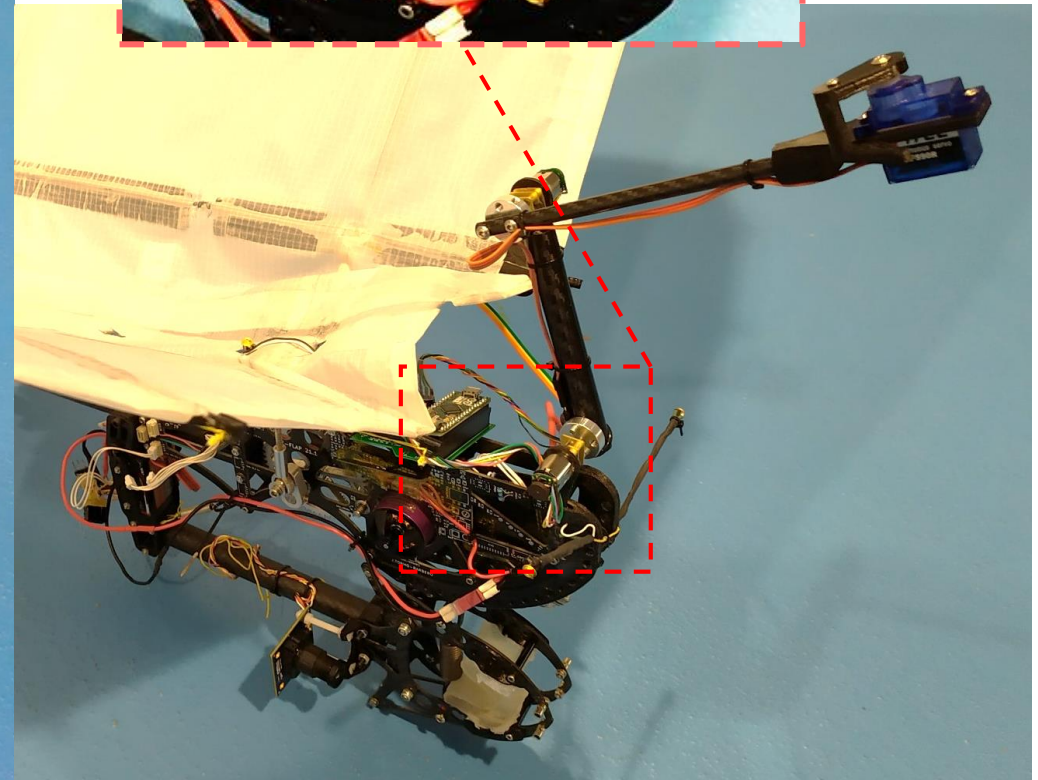
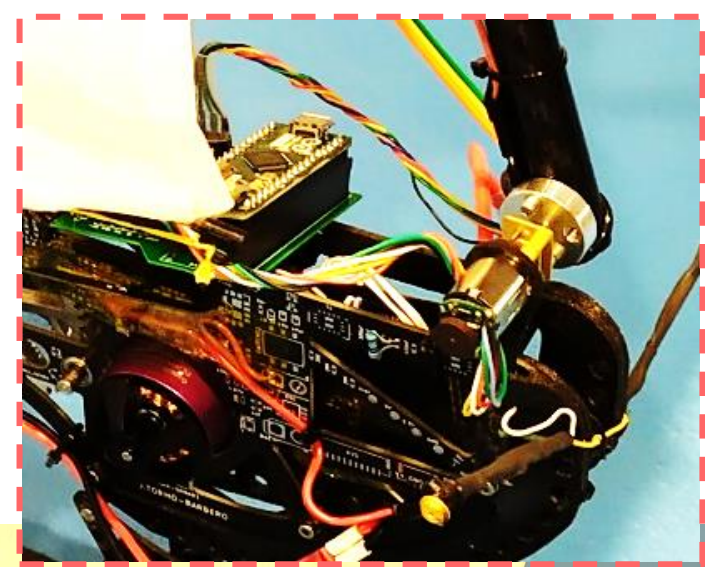
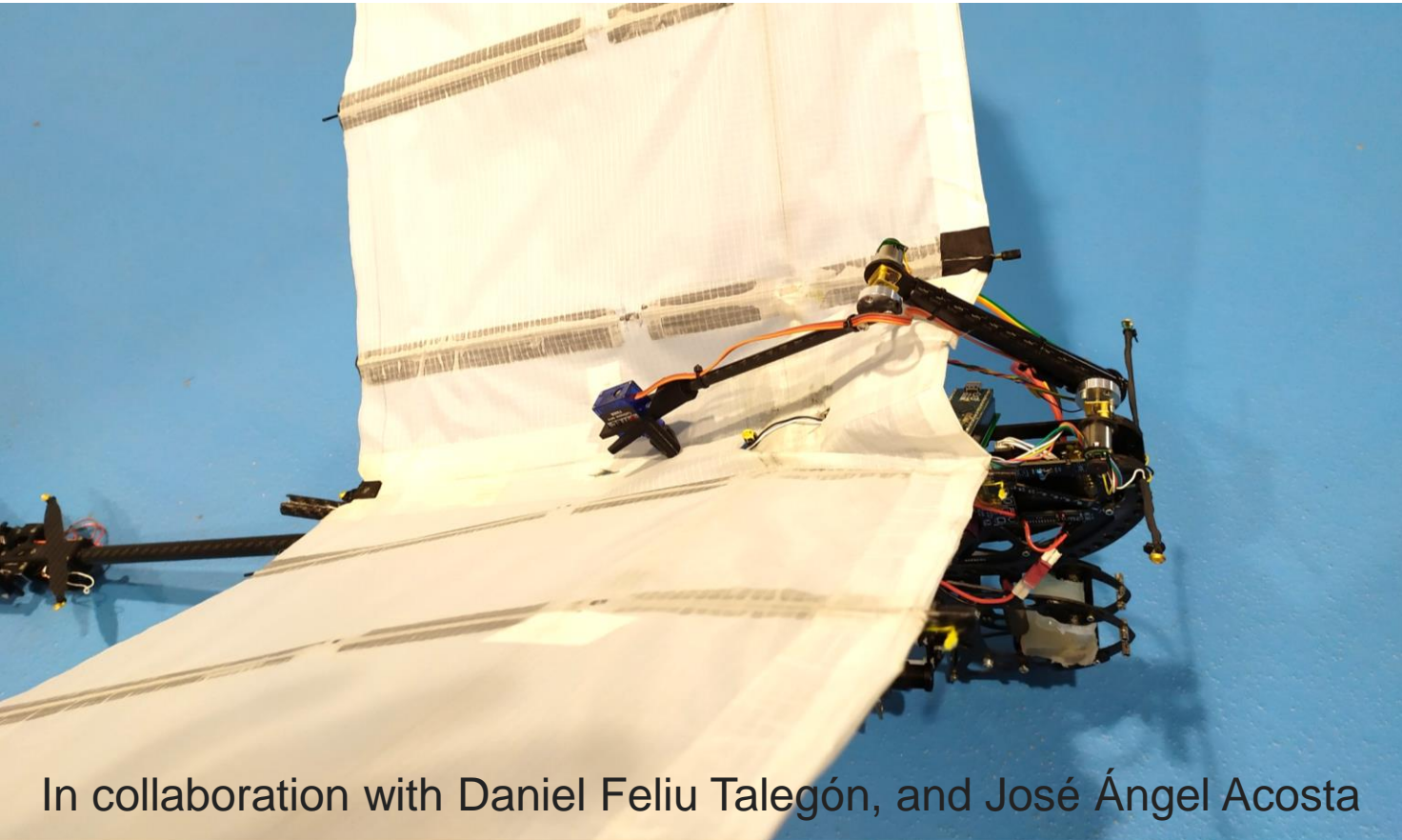
- Weight including electronics 79.8g



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# GRIFFIN Manipulation

- Installation on the bird



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# GRIFFIN Manipulation

- Next step:
  - Change the servo of the gripper (it has a minor problem)
  - Test stationery on the bird
  - Implementing control
  - Redo the same flight/perch on branch
    - Success: redesign reduce weight and use two arms (continue)
    - Failure: try to solve, move the leg back to balance, reiterate



# Thank you for your attention

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