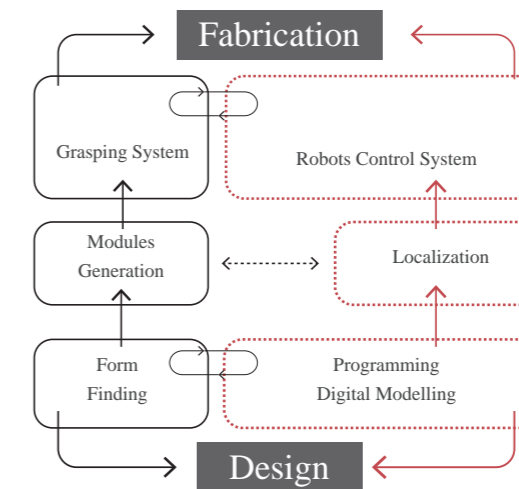


01

FLEXIBILITY IN CONNECTION

UNMANNED AERIAL VEHICLES CONSTRUCTION



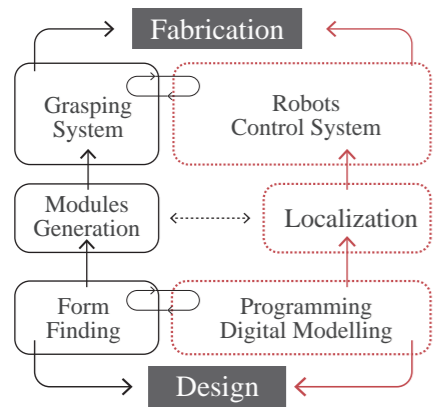
Type:
Collaborative Work

Key Word:
Agent-based, UAV, Fabrication, Discrete Structure

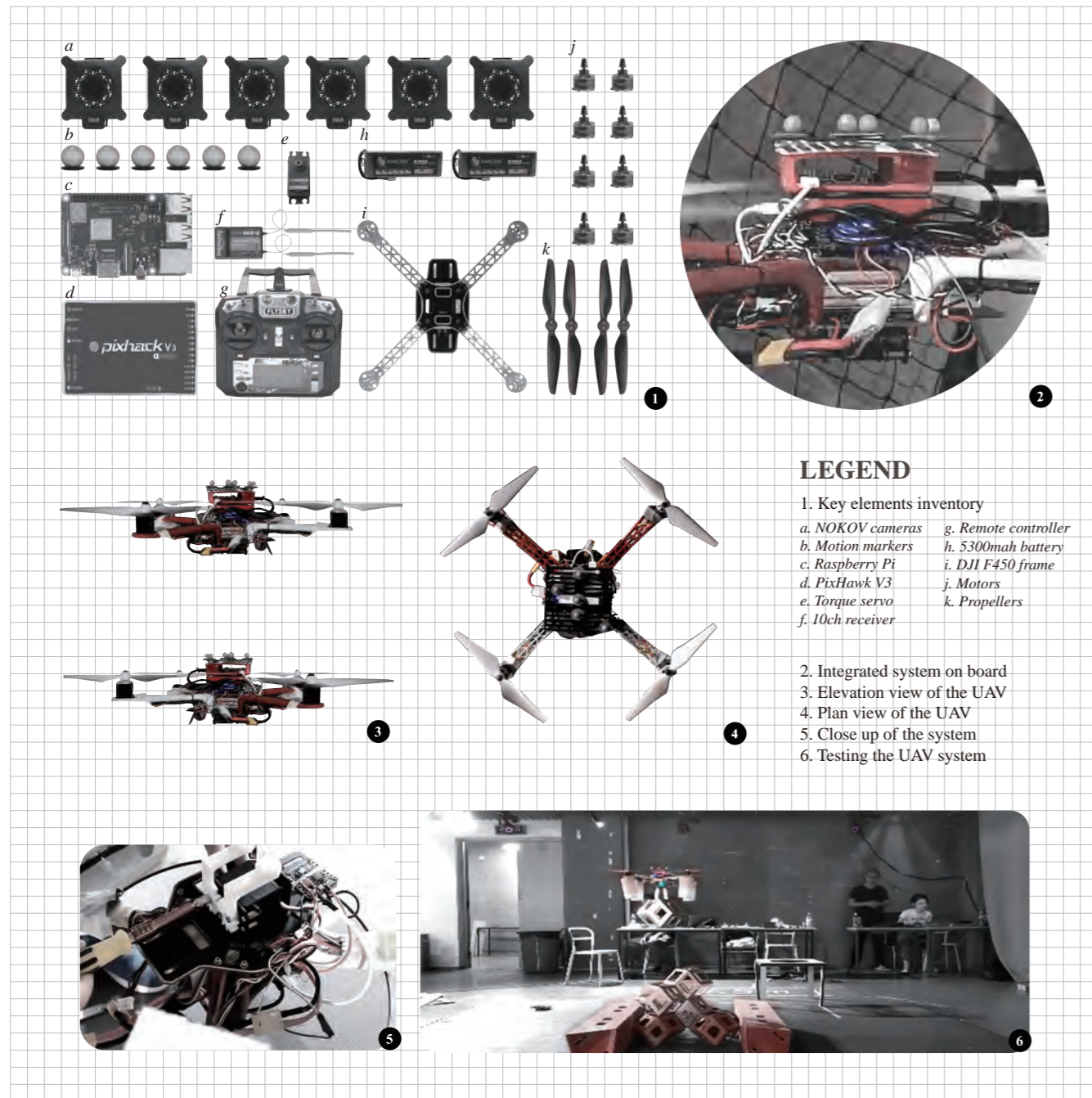
Tools:
ROS, Raspberry Pi, Rhino, Grasshopper, Powder 3D Printer

Abstract:

English Language Arts: Content Knowledge, Interactive Practice Test Use this interactive practice test to prepare for the English Language Arts: Content Knowledge test (5038). This full-length practice test lets you practice answering one set of authentic test questions in an environment that simulates the computer-delivered test. The practice test is timed just like the real test and allows you to move easily from question to question to simulate what you will experience on the day of the test. After completing the test, you can also see the correct answers and explanations for each correct answer and view your results by content category.



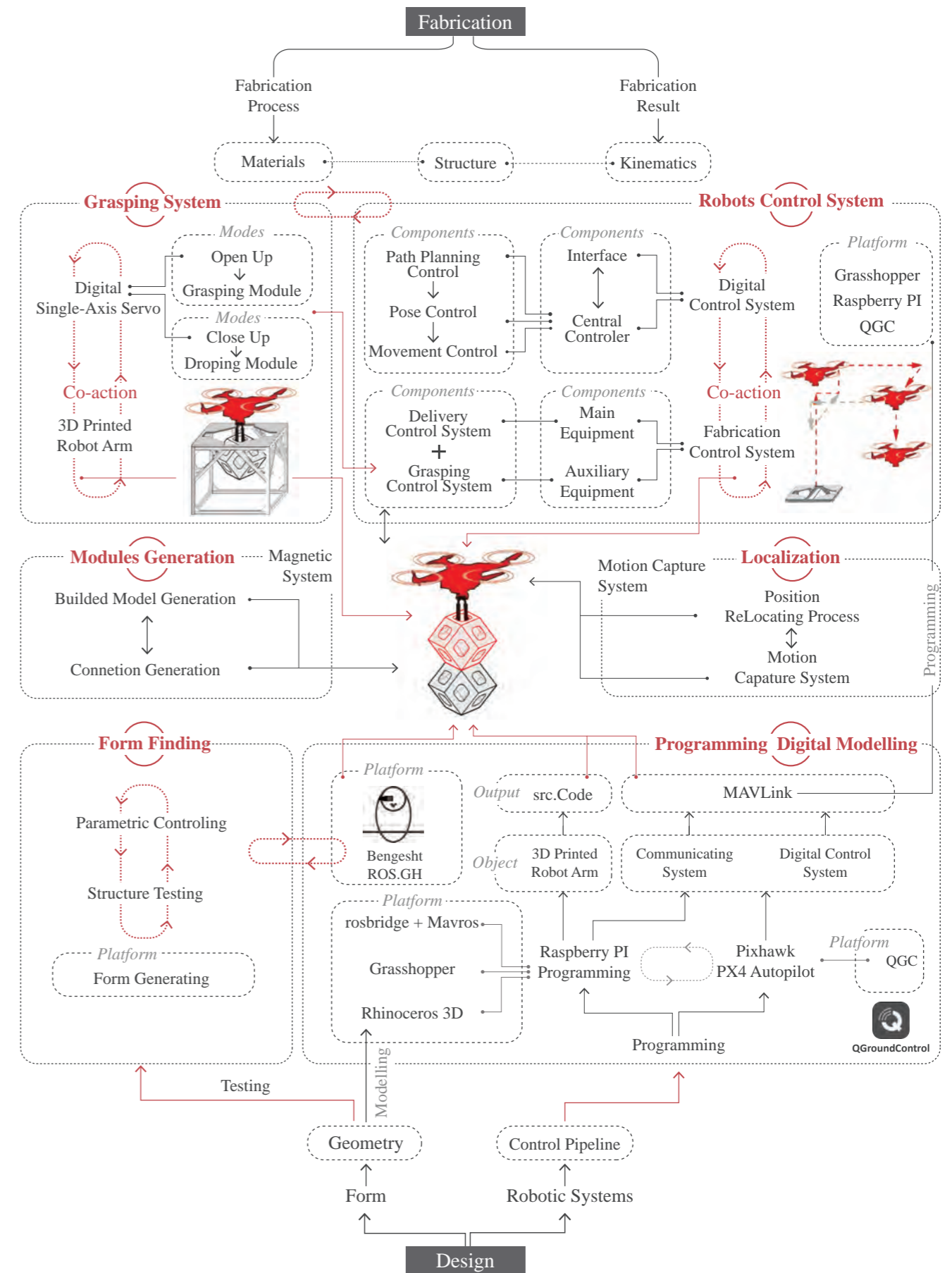
This project explores the feasibility of a complex space structure system for autonomously constructed discrete unit combinations of drones. It establishes a design method suitable for 1) autonomous construction of drones, 2) real-time control systems and 3) visual interface platforms. It summarizes the key technologies in modern digital construction. Through the specific analysis of the on-site dual-machine collaborative construction experiment, this paper demonstrates the overall process and optimization strategy of the experimental unit environment, the overall structure, the discrete unit design, the construction timing optimization and the two-machine intelligent coordination of the UAV discrete unit construction. The ideas and methods for further research are proposed for the independent construction of cluster agents.



LEGEND

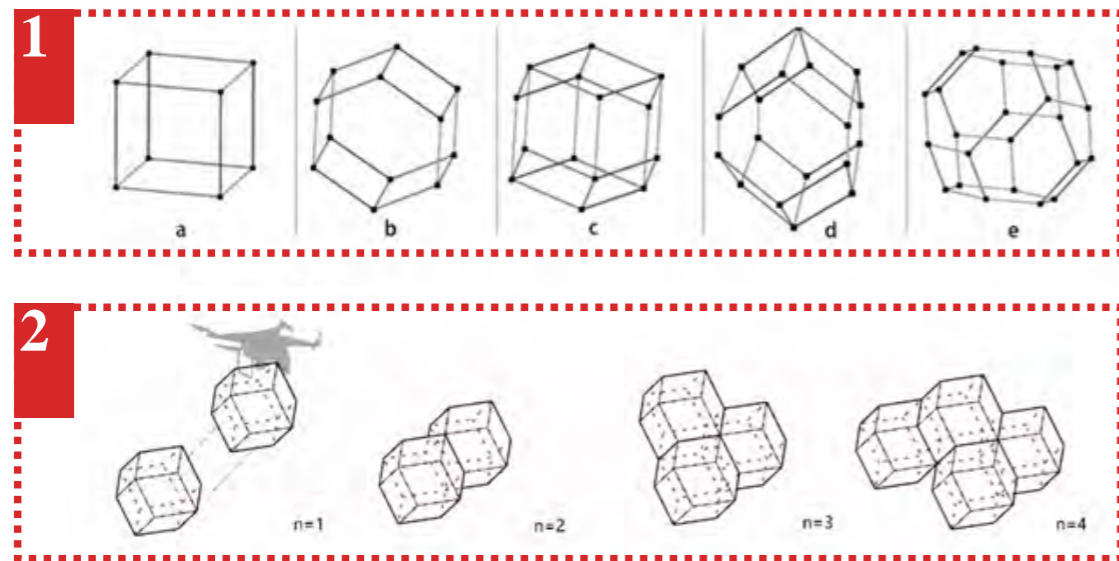
- 1. Key elements inventory
- a. NOKOV cameras g. Remote controller
- b. Motion markers h. 5300mah battery
- c. Raspberry Pi i. DJI F450 frame
- d. Pixhawk V3 j. Motors
- e. Torque servo k. Propellers
- f. 10ch receiver
- 2. Integrated system on board
- 3. Elevation view of the UAV
- 4. Plan view of the UAV
- 5. Close up of the system
- 6. Testing the UAV system

Components Involved In Fabrication

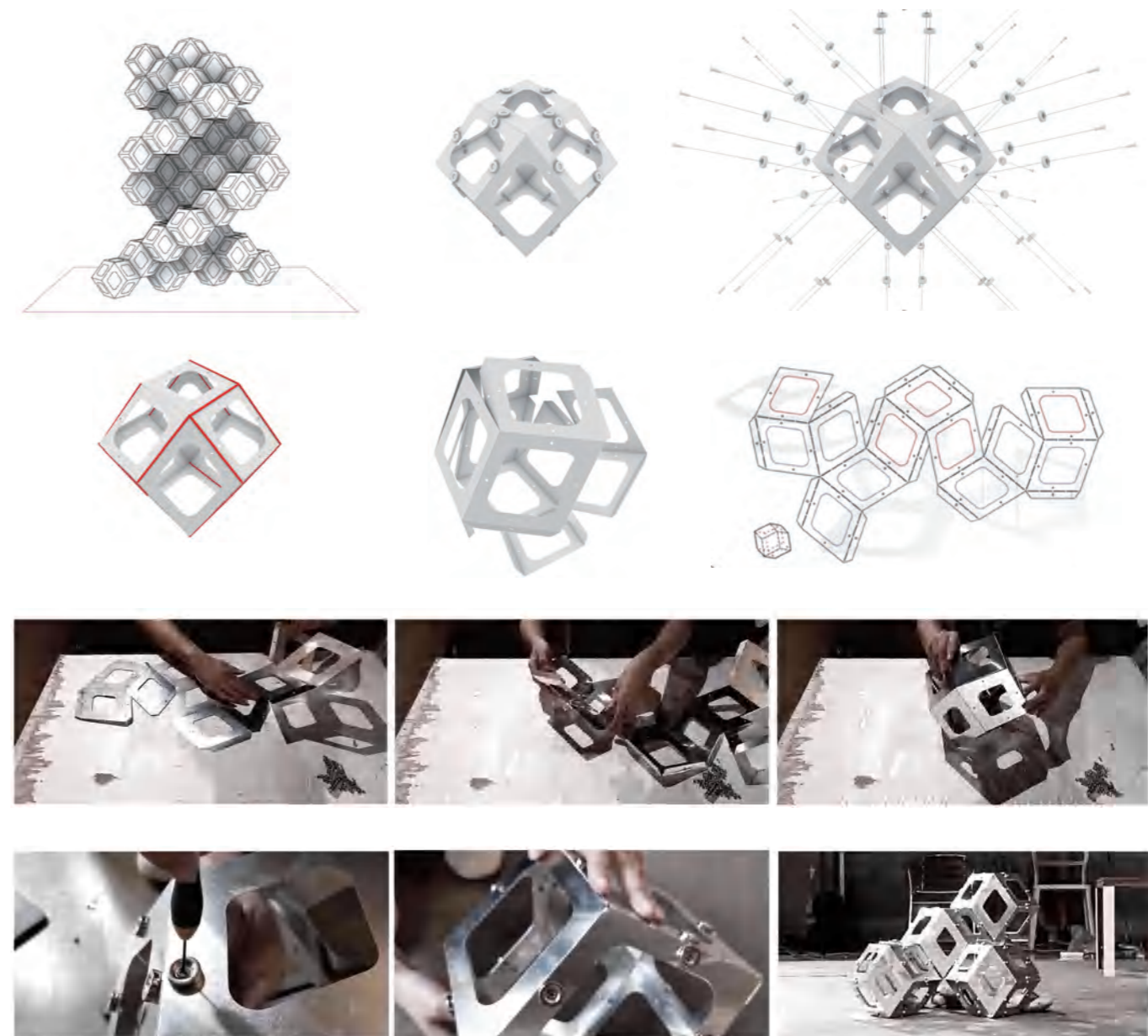
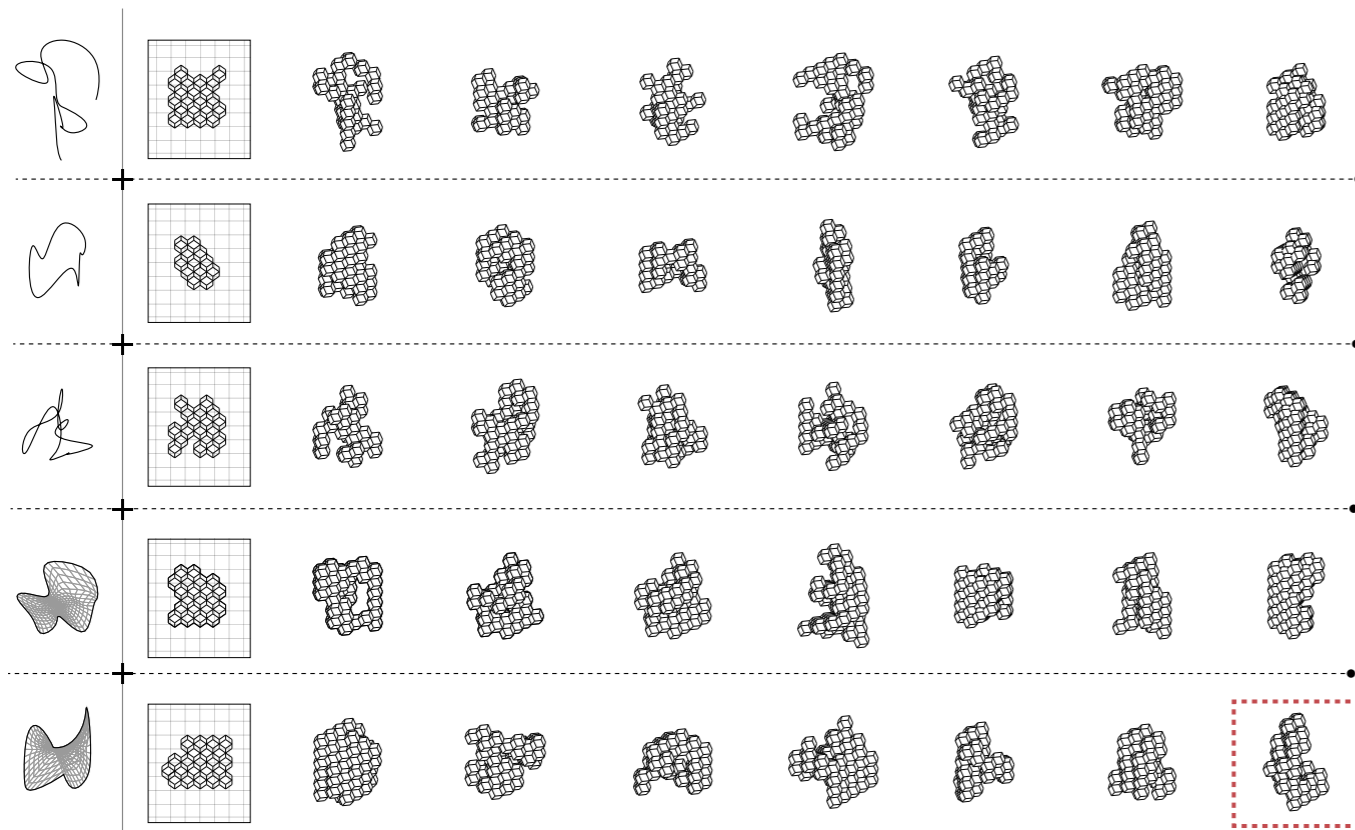


The Procedure of Integrating Fabrication into Design

English Language Arts: Content Knowledge, Interactive Practice Test Use this interactive practice test to prepare for the English Language Arts: Content Knowledge test (5038). This full-length practice test lets you practice answering one set of authentic test questions in an environment that simulates the computer-delivered test. The practice test is timed just like the real test and allows you to move easily from question to question to simulate what you will experience on the day of the test. After completing the test, you can also see the correct answers and explanations for each correct answer and view your results by content category.



English Language Arts: Content Knowledge, Interactive Practice Test Use this interactive practice test to prepare for the English Language Arts: Content Knowledge test (5038). This full-length practice test lets you practice answering one set of authentic test questions in an environment that simulates the computer-delivered test. The practice test is timed just like the real test and



Experiment

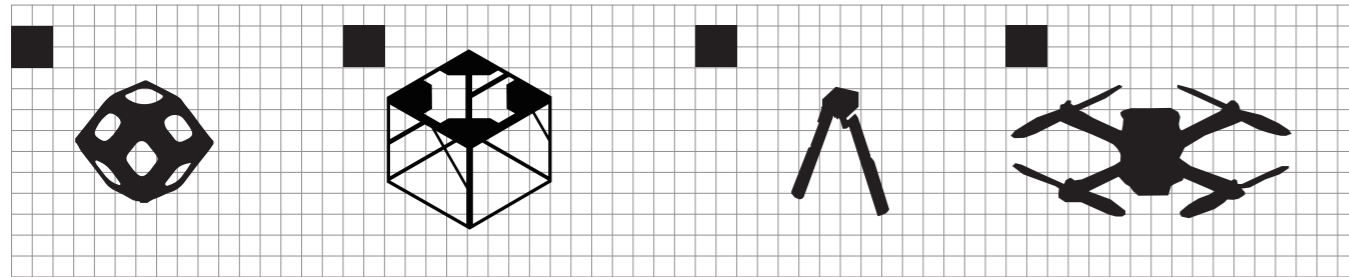
English Language Arts: Content Knowledge, Interactive Practice Test Use this interactive practice test to prepare for the English Language Arts: Content Knowledge test (5038). This full-length practice test lets you practice answering one set of authentic test questions in an environment that simulates the computer-delivered test. The practice test is timed just like the real test and allows you to move easily from question to question to simulate what you will experience on the day of the test. After completing the test, you can also see the correct answers and explanations for each correct answer and view your results by content category.

Note: There are three versions available for this test title, Form 1, Form 2 and Form 3. Each interactive practice test Form consists of a single set of practice questions. Each

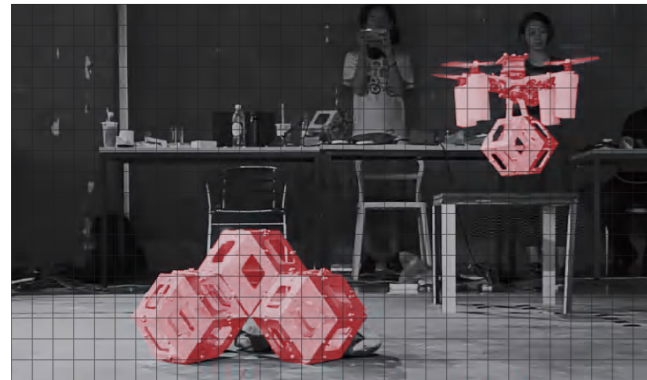
Experiment

English Language Arts: Content Knowledge, Interactive Practice Test Use this interactive practice test to prepare for the English Language Arts: Content Knowledge test (5038). This full-length practice test lets you practice answering one set of authentic test questions in an environment that simulates the computer-delivered test. The practice test is timed just like the real test and allows you to move easily from question to question to simulate what you will experience on the day of the test. After completing the test, you can also see the correct answers and explanations for each correct answer and view your results by content category.

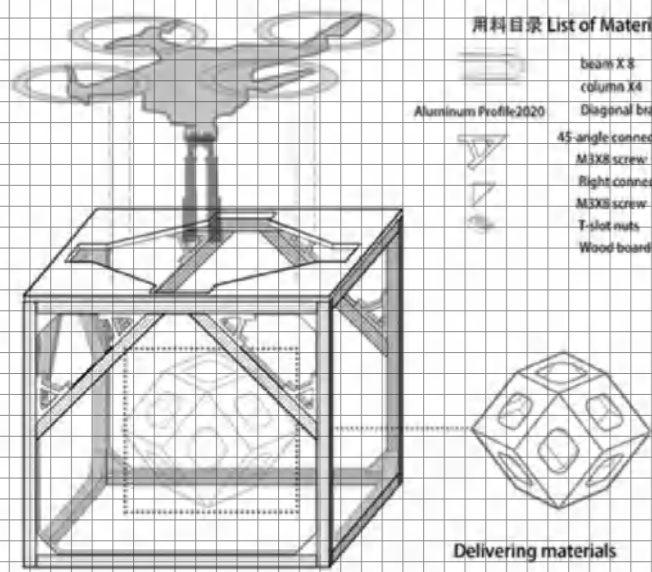
Note: There are three versions available for this test title, Form 1, Form 2 and Form 3. Each interactive practice test Form consists of a single set of practice questions. Each



English Language Arts: Content Knowledge, Interactive Practice Test Use this interactive practice test to prepare for the English Language Arts: Content Knowledge test (5038). This full-length practice test lets you



1

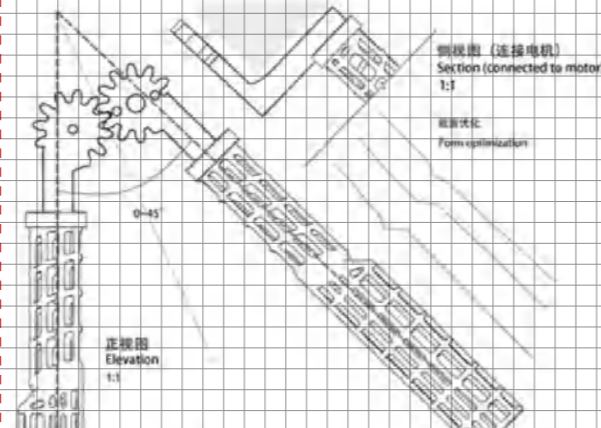
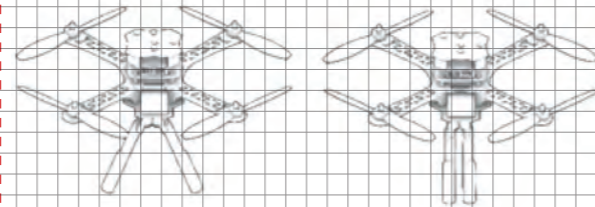


用料目录 List of Material

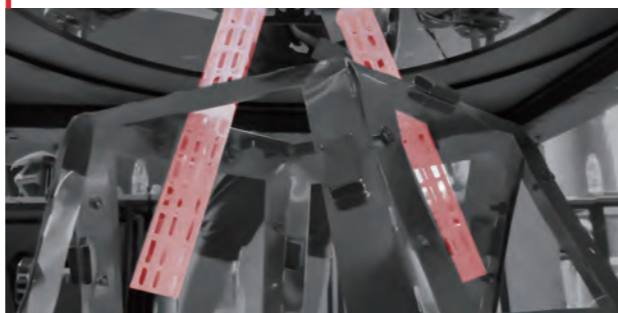
- beam X 8
- column X4
- Diagonal brace X6
- 45-angle connector X12
- M3X8 screw
- Right connector X14
- M2X8 screw
- T-slot nuts
- Wood board X2

Delivering materials

2

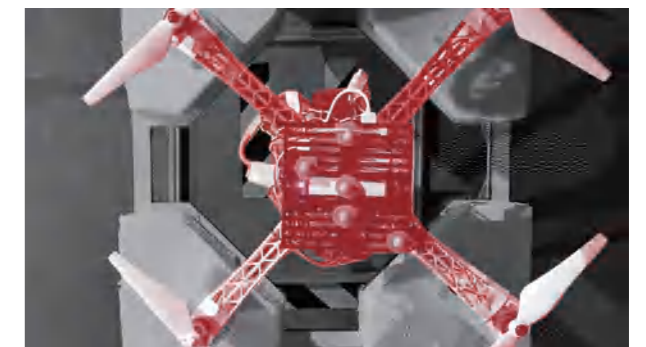
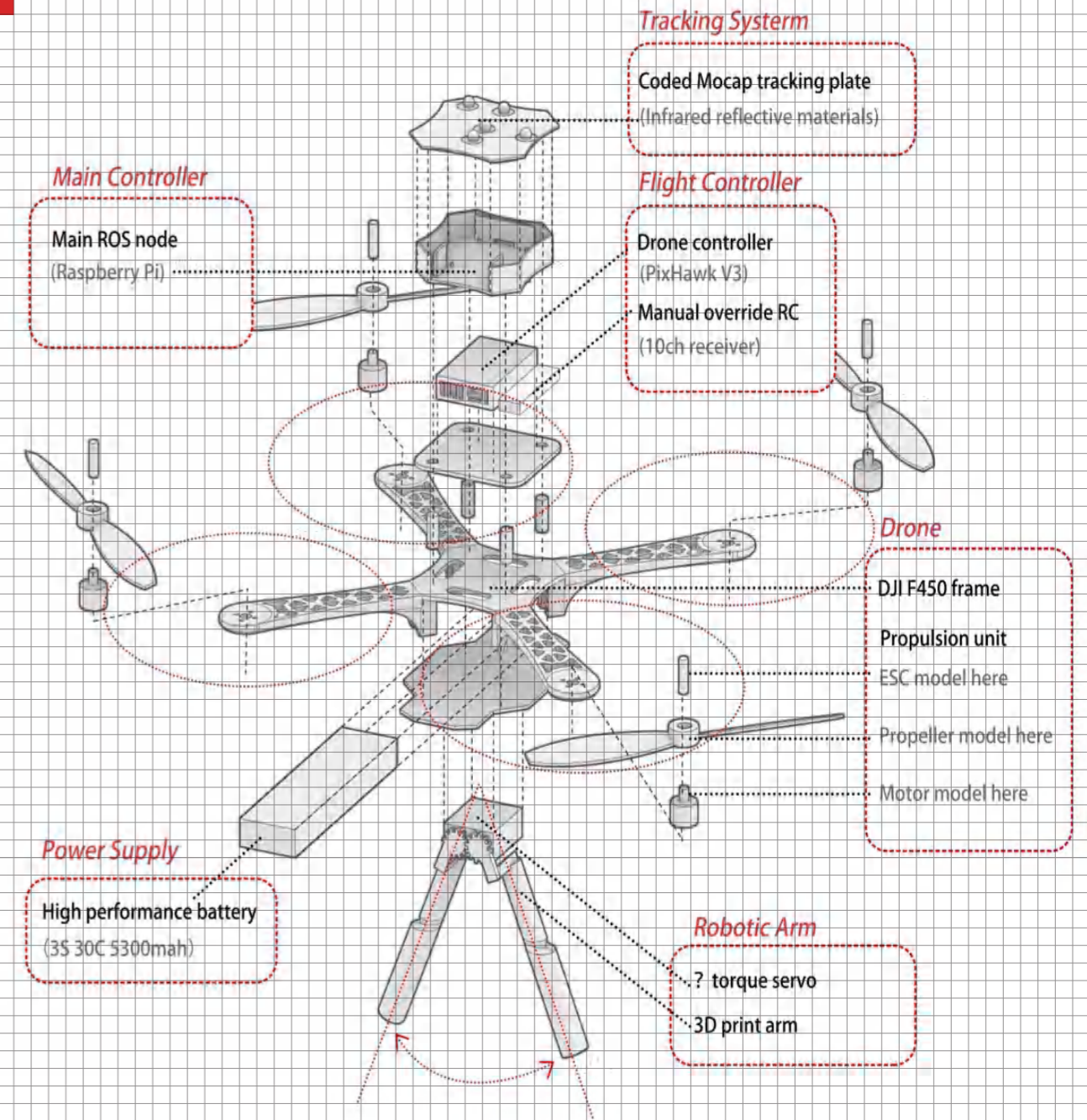


工作流程
Workflow
工作过程中，内外四组结构同步，紧密配合。
During working, it synchronously open and close to grab.

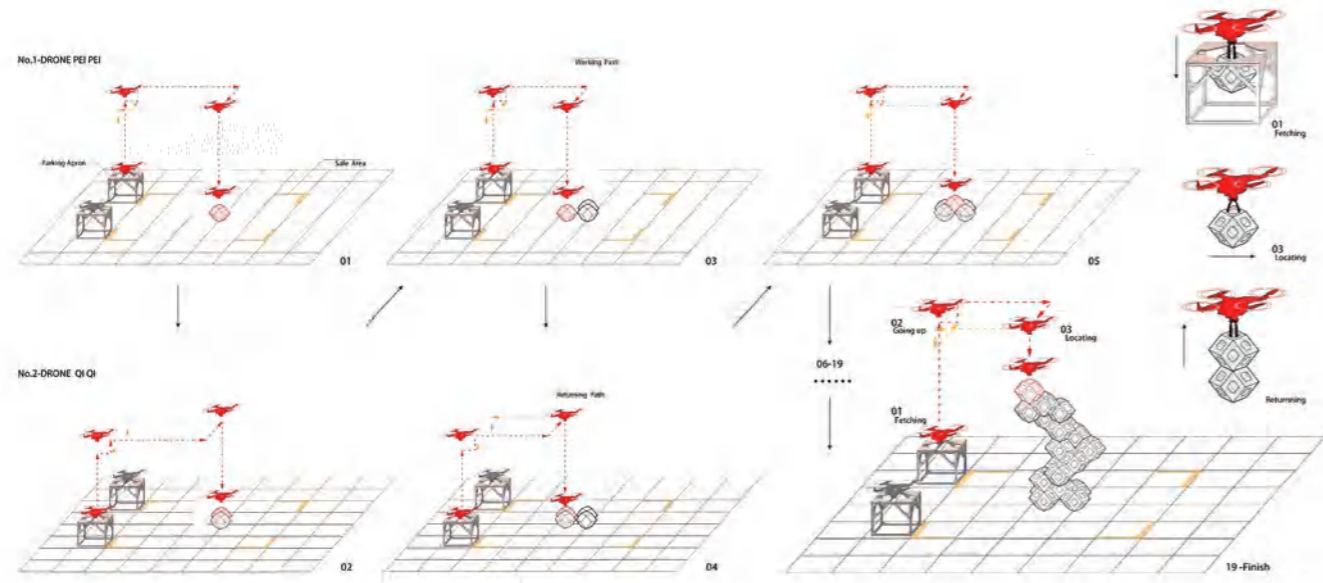


ROS, Raspberry Pi, Rhino, Grasshopper, Powder 3D Printer

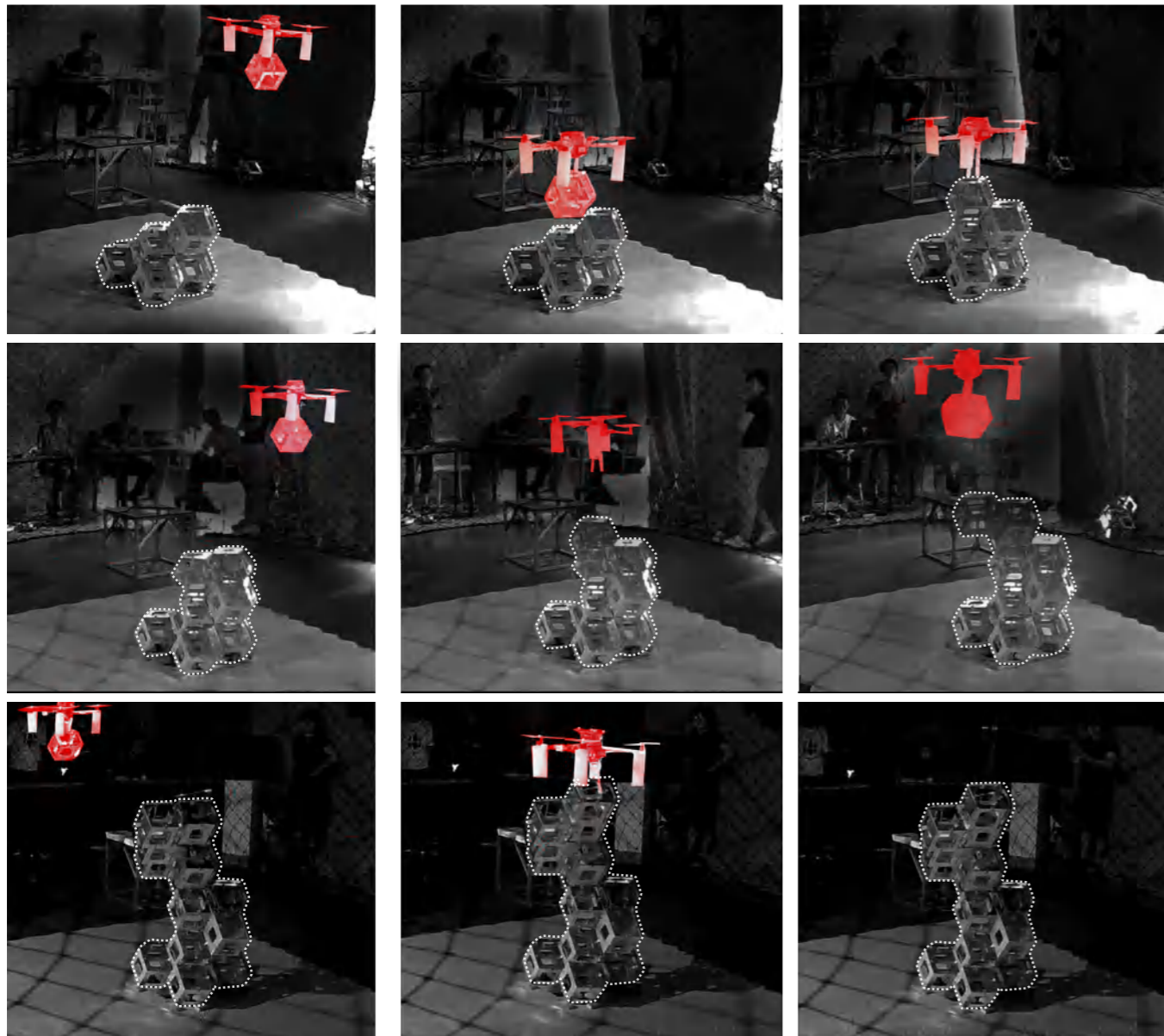
3



ROS, Raspberry Pi, Rhino, Grasshopper, Powder 3D Printer



Path Planning of Assembly Process



Whole Printing Process | Freeze Frames of the Movie

