

# Augmented Reality Visualizations of Internet of Things Data

## Project Leaders



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# Who We Are

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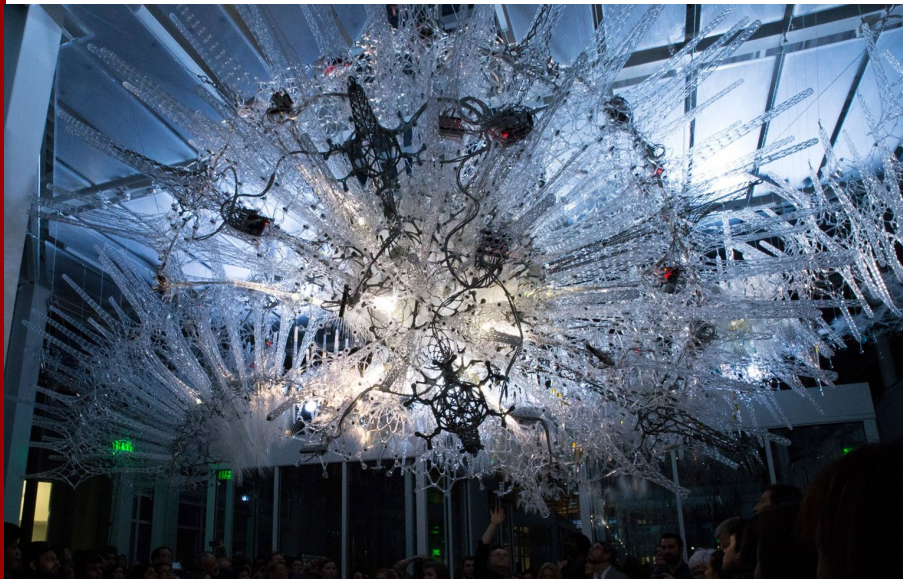
Sierra T. Reed

Ploy Sithisakulrat

Yiyao Wei

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# AMATRIA

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Image sources:

<https://cns.iu.edu/amatria.html>

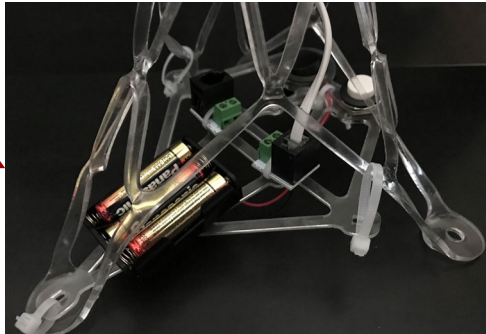
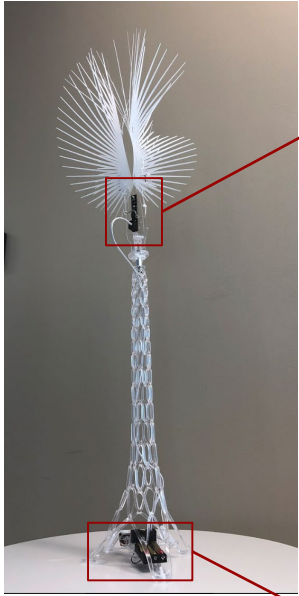
<https://news.iu.edu/stories/2018/04/iub/inside/17-sentient-art-unveiled-at-luddy-hall.html>

# We Built 5 Amatria Babies!

Moths are one of the main actuators in the sculpture. They have two vibrating motors and two LEDs to interact with people.

They are comprised of:

- 1 node controller
- 1 acrylic sled for node controller
- 2 acrylic arms
- 2 double-frosted mylar frawns
- 2 LEDs
- 2 motors



Amatria Moth



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# Amatria Moth Components and Manual

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 Architect Inc.  
 213 Sterling Road Suite 200  
 Toronto, Canada  
 M6R2B2  
 web: philipbeesleyarchitect.com  
 web: livingarchitecturesystems.com  
 tel: 416 766-8284

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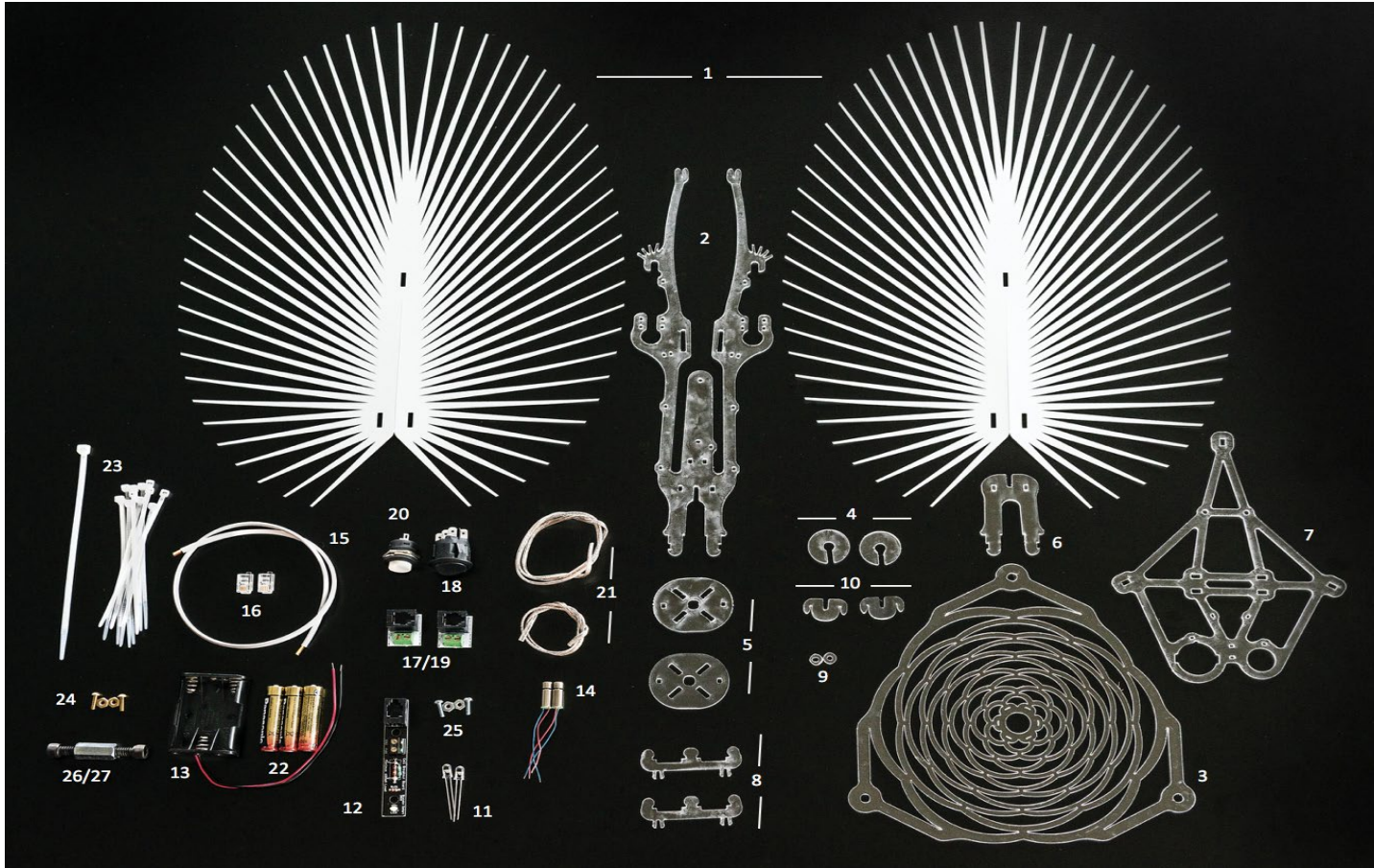
Notes

Legend

1. Frond(2)
2. Moth sled(1)
3. Spar(1)
4. Moth sled fastening(2)
5. Moth sled fastening plate(2)
6. Moth sled holder(1)
7. Electronics sled(1)
8. Electronics sled fastener(2)
9. Acrylic washer(2)
10. Frond fastener(2)
11. LED lightbulb(2)
12. Jack plate(1)
13. Battery pack(1)
14. DC motor(2)
15. Flat 4P short cable (47cm)(1)
16. Modular plug end(2)
17. Moth breakout board(2)
18. DPDT switch(2)
19. APAC jack(2)
20. Momentary button(1)
21. 24AWG speaker wire(2)
22. AAA battery(3)
23. Zip ties (12 sm, 1lg)
24. Screw & washers for battery pack (2ea)
25. Screw & washers for moth sled (2ea)
26. Large plastic screw(2)
27. Metal sleeve for large plastic screw(1)

Project  
**Amatria Moth**

Title  
**Amatria Moth Parts**



# Demo Time!



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# Potential Research Questions

- How can this be used in everyday living by “normal people” outside of CS?
- How can Amatria (and more broadly, IoT) empower people to make more informed, aware decisions?
- Could Amatria moths be built with different materials? *New tools?*
- Is sentient architecture suitable for everyone’s home? What is the benefit to have it at home? And what are the potential issues?
- How can we utilize Amatria Moth to connect and empathize (particularly between human beings who are physically distant from each other)? *Human computer interaction?*
- How can we optimize Amatria to be more feasible to assemble and more suitable for every household? *Optimize and educate?*
- What would sentient architecture look like if it weren’t a sculpture? *Shape?*

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# Reference

- <https://cns.iu.edu/amatria.html>



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***A BIG THANK YOU***  
**to OurCS and everyone who**  
**made HelloResearch possible**

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