

# Pet Hair Brush

Presented by:  
Group C

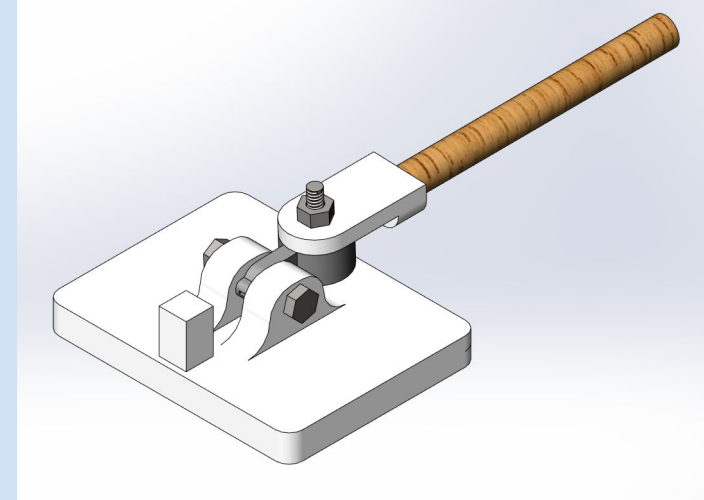
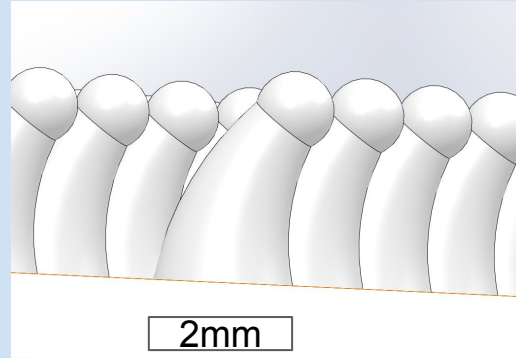
- Ranga Rutiser Sundar
- Mira Faizul
- Angelina Barone
- Dan Haikal

# Pet Owners

- Many existing brushes just aren't good enough, and pet hair can be a mess
- Pet can be hard to brush
- It is difficult to clean up all the fur
- Need fast, easy, safe, and affordable products

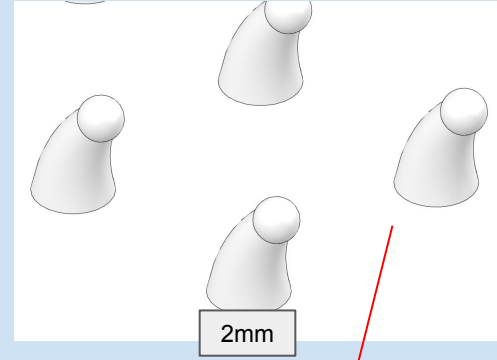
# Competitive Advantages

- Unique bristles imitate cat papillae
- Hinge aims to better conform to pet
- Spring acts to keep the brush in its centered position



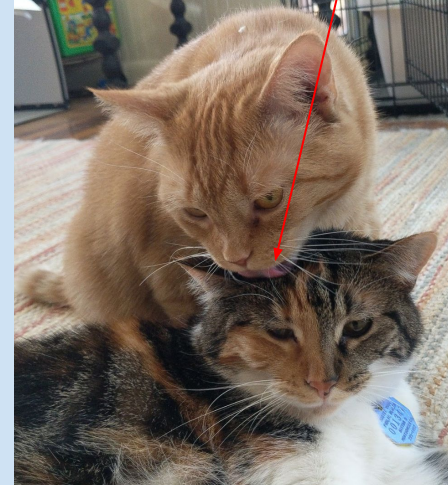
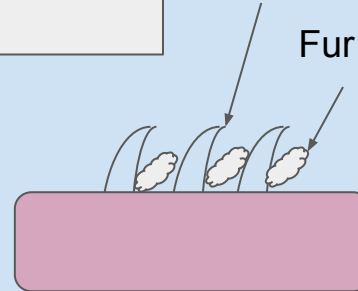
# Grand Concept

- Pet brush uses unique biomimetic bristles and swivelling hinge to improve ease of use
- Cats use papillae, small keratin spines embedded in their tongue, to clean their fur
- Hinge (similar to those found in razors) allows flat brush to conform to pet
- Small strip of steel serves as a spring to keep the brush in its centered orientation



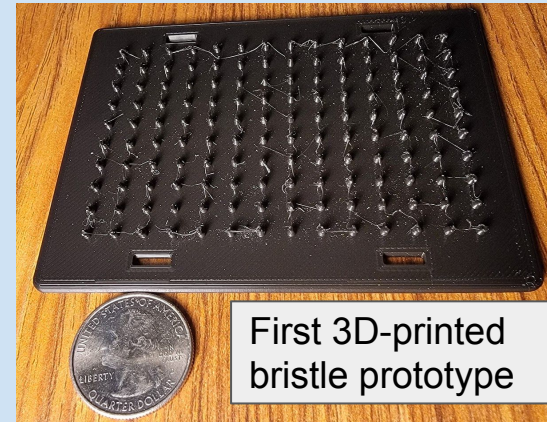
Papilla

Fur



# Prototyping Plan

- Unique bristles iterated quickly using additive manufacturing
- Scalable to injection molding for production volumes
- Brush handle and body use simple materials (bolts, wood dowel, etc.) for low-cost testing
- Testing of brushing efficacy, ease of cleaning, and bristle durability



First 3D-printed  
bristle prototype

# Reference

[1] HERTZKO. “HERTZKO self-cleaning slicker brush for dogs and cats pet grooming dematting brush easily removes mats, tangles, and loose fur from the pet’s coat (original).” Amazon.com, <https://www.amazon.com/dp/B00ZGPI30Y/> (accessed Mar. 31, 2022).