

**MICHIGAN STATE**  

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**UNIVERSITY**

# Beta Presentation

## Smart Little Hunter of Fakes

### The Capstone Experience

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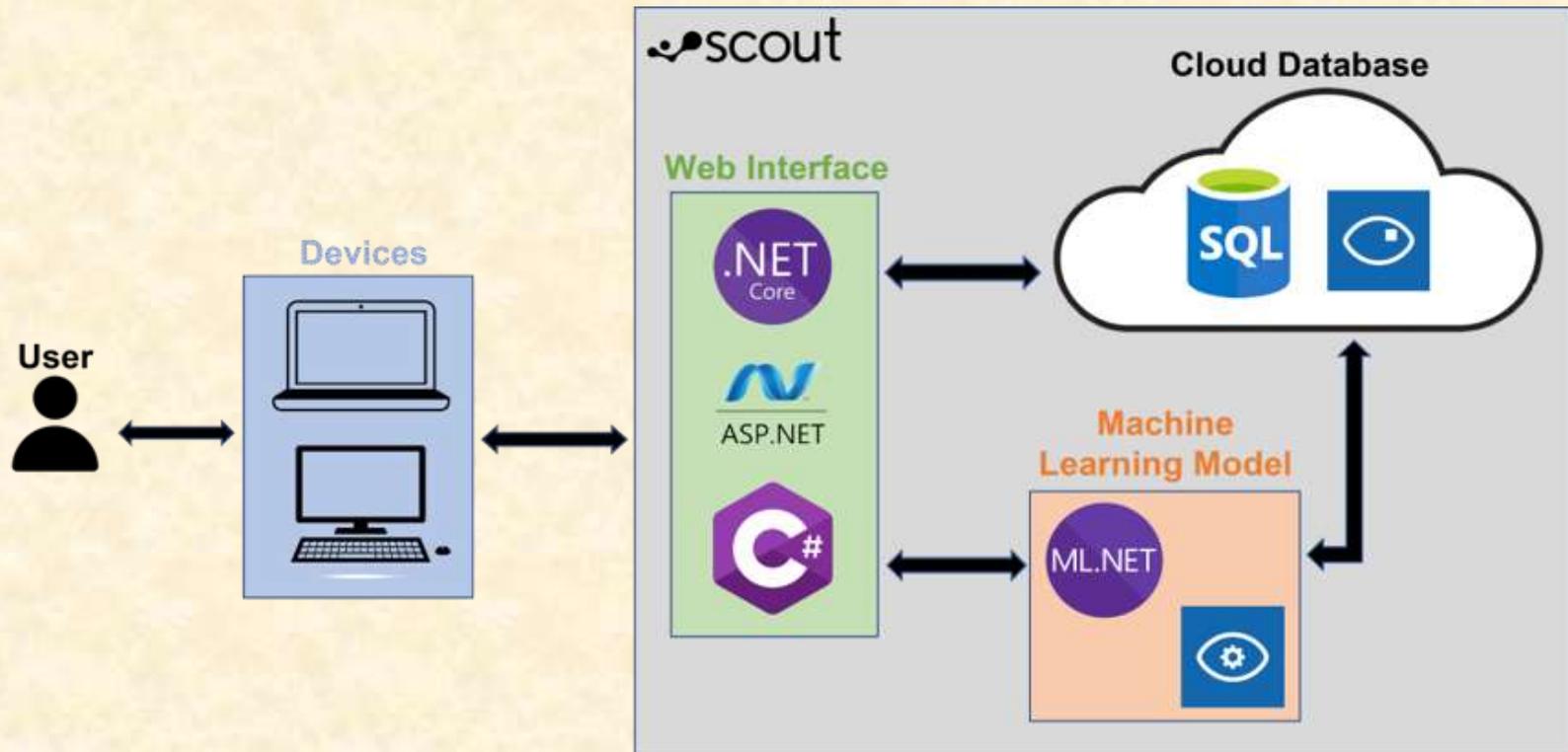
*From Students...  
...to Professionals*

# Project Overview

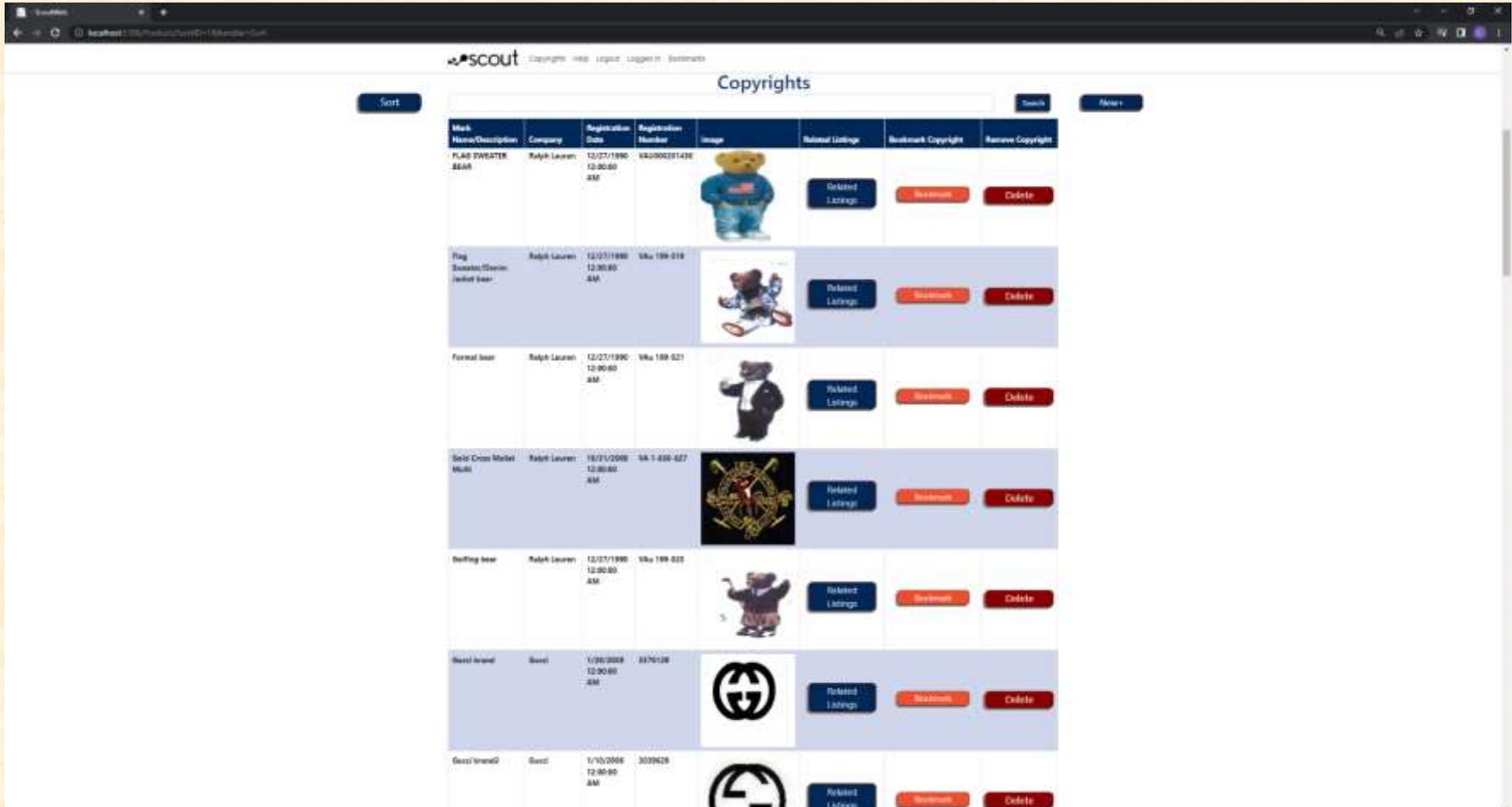
- The international trade in counterfeit and pirated products amounts to more than \$500 billion, which is 3.3% of world trade
- Our system provides an easy way of collecting and identifying fake product listings
- We use brand specific information to crawl the web for similar product listings
- Our users review data and provide a response of "Real", "Fake" or "Unknown"
- Our system provides a prediction based on user responses



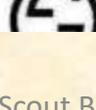
# System Architecture



# Copyrights Page



The screenshot shows a web application interface for managing copyrights. The page title is "Copyrights" and it includes a search bar and a "Main" button. The main content is a table with the following columns: Mark Name/Description, Company, Registration Date, Registration Number, Image, Related Listings, Bookmark Copyright, and Remove Copyright. The table contains seven rows of data, each representing a different mark or trademark.

Mark Name/Description	Company	Registration Date	Registration Number	Image	Related Listings	Bookmark Copyright	Remove Copyright
FLAN SWEATER BEAR	Ralph Lauren	12/07/1990 12:00:00 AM	63200021431		<a href="#">Related Listings</a>	<a href="#">Bookmark</a>	<a href="#">Delete</a>
Flag Sweater/Slip-on Jacket bear	Ralph Lauren	12/07/1990 12:00:00 AM	63200021431		<a href="#">Related Listings</a>	<a href="#">Bookmark</a>	<a href="#">Delete</a>
Formal bear	Ralph Lauren	12/07/1990 12:00:00 AM	63200021431		<a href="#">Related Listings</a>	<a href="#">Bookmark</a>	<a href="#">Delete</a>
Gold Cross Medal M&M	Ralph Lauren	10/01/2008 12:00:00 AM	64-1-800-627		<a href="#">Related Listings</a>	<a href="#">Bookmark</a>	<a href="#">Delete</a>
Beating bear	Ralph Lauren	12/07/1990 12:00:00 AM	63200021431		<a href="#">Related Listings</a>	<a href="#">Bookmark</a>	<a href="#">Delete</a>
Good brand	Good	1/30/2008 12:00:00 AM	3376128		<a href="#">Related Listings</a>	<a href="#">Bookmark</a>	<a href="#">Delete</a>
Good brandG	Good	1/30/2008 12:00:00 AM	3029428		<a href="#">Related Listings</a>	<a href="#">Bookmark</a>	<a href="#">Delete</a>



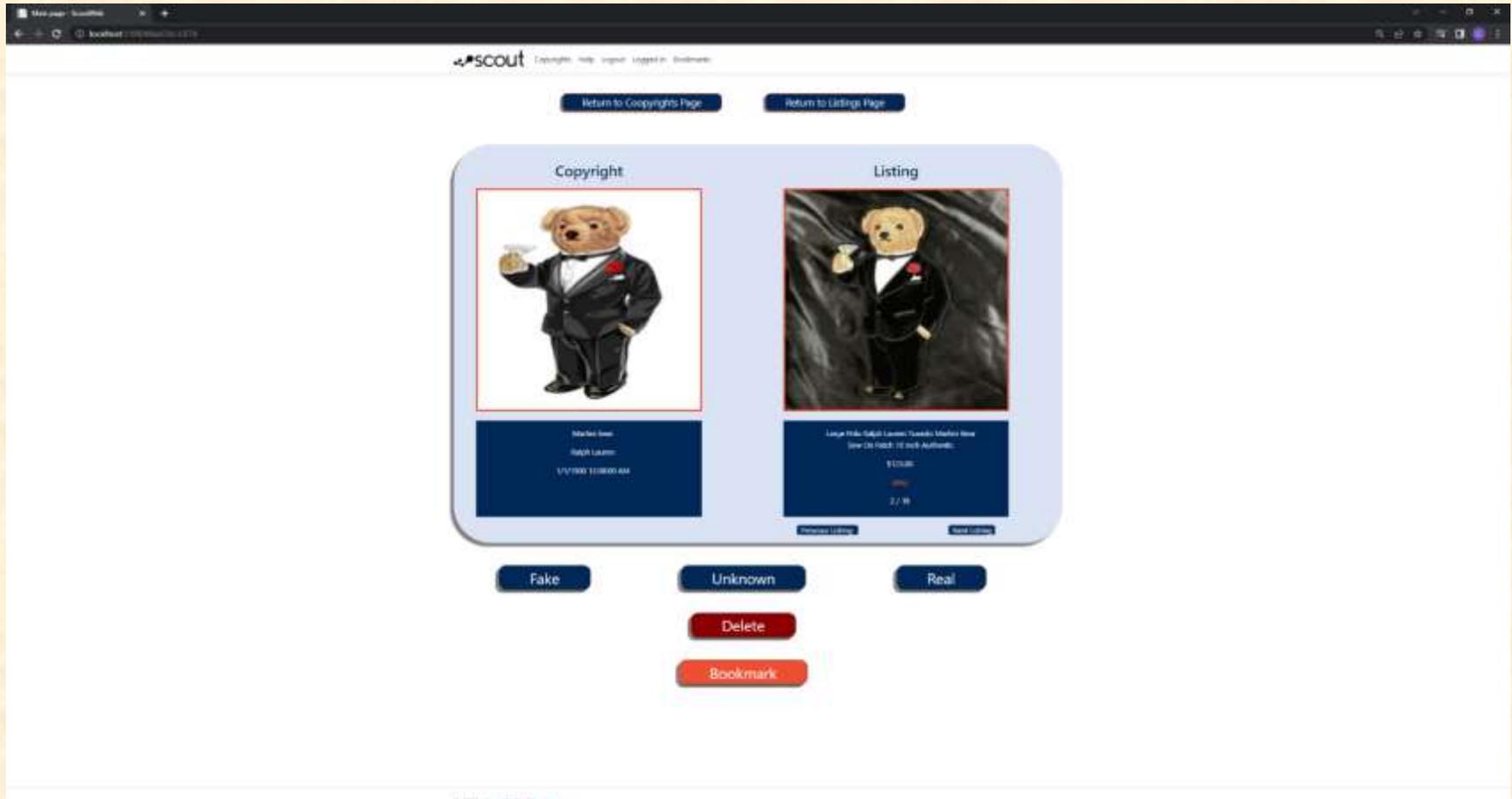
# Listings Page

The screenshot shows the Scout Listings page. At the top, there is a navigation bar with the Scout logo and links for 'Home', 'Refresh', and 'Predict'. Below the navigation bar is a 'Returns to Copyrights Page' button. On the left side, there is a small image of a teddy bear in a suit with the text 'Merrill Bear' and a 'Sort' button. The main content is a table of listings.

Item ID	Image	Title	Price	Retailer	User Response	System Position	Submit Response	Bookmark Product	Delete Listing
10		Belly Broy Polo Bear Soft Cotton Polo Shortall	\$65.00	Amazon	No Response (0.00%)	False (18.18%)	Respond	Bookmark	Delete
11		Large Polo Ralph Lauren Tweed Merril Bear Saw On Patch 18 Inch Autograph	\$126.00	eBay	No Response (0.00%)	False (0.00%)	Respond	Bookmark	Delete
12		Men's Ralph Lauren Polo Bear T-Shirt Size XL White Tweed Merril Bear MHWY Ring	\$19.00	eBay	No Response (0.00%)	False (0.00%)	Respond	Bookmark	Delete
13		Polo Bear By Ralph Lauren Sweater M	\$175.00	eBay	No Response (0.00%)	False (0.00%)	Respond	Bookmark	Delete
14		polo bear ralph lauren merline holiday cards sweater red Tweed!	\$15.00	eBay	No Response (0.00%)	False (0.00%)	Respond	Bookmark	Delete
15		Polo Ralph Lauren Merril Bear Beanie Hat RARE MHWY OS	\$25.00	eBay	No Response (0.00%)	False (0.00%)	Respond	Bookmark	Delete
16		POLO RALPH	\$22.00	eBay	No Response	False (0.00%)			



# Comparison Page



# Bookmark Page

scout Copyrights Help Logout Logged Out Bookmarks

[Return to Copyrights Page](#) **Bookmarks**

Mark Name/Description	Company	Registration Date	Registration Number	Image	Delete Bookmark	Related Listings
Martin bear	Martin Luther	1/7/1800 12:00:00 AM	VA 2,187,521		<a href="#">Delete</a>	<a href="#">Related Listings</a>
Gucci brand	Gucci	1/25/2006 12:00:00 AM	3376129		<a href="#">Delete</a>	<a href="#">Related Listings</a>
Timberland brand	Timberland	1/7/1800 12:00:00 AM	4878270		<a href="#">Delete</a>	<a href="#">Related Listings</a>

Image	Title	Price	Retailer	User Response	System Prediction	Select Response	Delete Bookmark	Return to Listings Page
	\$388 NEW POLO RALPH LAUREN Cream POLO YEDDY BEAR Knit Sweater Jumper Pullover M	\$265.00	ebay	Real (79.00%)	Fake (21.00%)	<a href="#">Response</a>	<a href="#">Delete</a>	<a href="#">Related Listings</a>
	Polo Ralph Lauren MARY MARMON BEAR White Towels Curved Blue Box T-shirt Size S	\$105.00	ebay	No Response (0.00%)	Fake (0.00%)	<a href="#">Response</a>	<a href="#">Delete</a>	<a href="#">Related Listings</a>
	Large Polo Ralph Lauren Towels Marmot Bear Size On Patch T8 book Authentic	\$125.00	ebay	No Response (0.00%)	Fake (0.00%)	<a href="#">Response</a>	<a href="#">Delete</a>	<a href="#">Related Listings</a>



# What's left to do?

- Features
- Stretch Goals
  - Filters to enable associated company view
  - Company Page in addition to Copyrights Page
  - Share functionality expanded upon
  - Training feature for machine learning model
- Other Tasks
  - UI overhaul
  - Second machine learning model for prediction
  - Track user interactions to give each user a personalized experience



# Questions?

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