







Alventures: Unleashing the Future

Leon Xu


 Microsoft - Full-time
Aug 2013 - Present - 10 yrs
Greater Seattle Area

+2013 Group Engineer Manager in Search, Map and News Team,
Led the local & search shows result in xx revenue growth and beating Google experience on Mobile 8 ..


 

 Electronic Arts (EA) - Full-time
May 2012 - Aug 2013 - 1 yr 4 mos
San Francisco Bay Area

+Founding Director of EADP, driving the new commerce revenue from inception to \$120M.
-Served as the Engineer Leader of the Commerce & Identity platform in the EA California team. Led th ..

 UrbanQ
Sep 2010 - May 2012 - 1 yr 9 mos
Greater Seattle Area

-Launched the locationGenome API, generating \$xxK in revenue, and secured A funding with a valuation million within one year....

 Zillow.com Inc
Apr 2007 - Dec 2008 - 1 yr 9 mos

+Pioneered the development of the largest digital real estate data platform, integrating data from multi sources in real-time, surpassing "move.com" in both data accuracy, quality and drives daily user growth



Topics

- AI Enhanced Search: Redefining Discovery and Relevance
- Innovation in eCommerce: The Rise of Chatbots
- Personalized Companion AI: The Future of User-Centric Interaction

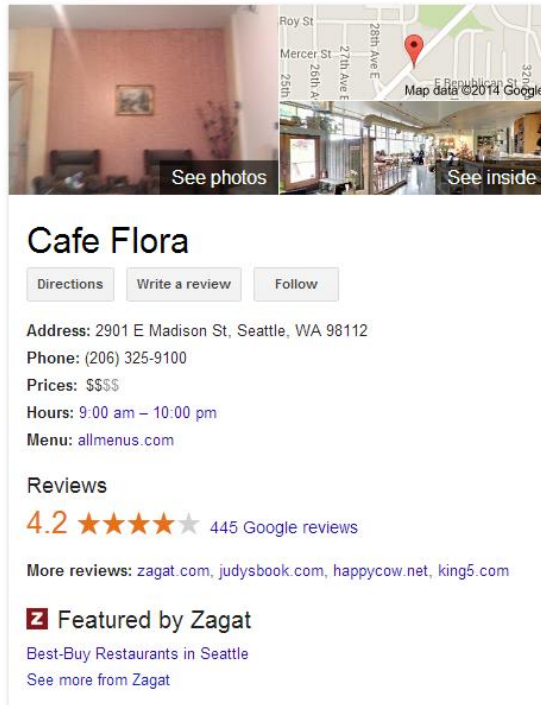


Redefine Discovery

From NDCG -> Session Success Rate

Page Search -> Task Completion

Google



Google search results for Cafe Flora. The page includes a map, photos, and detailed information about the restaurant.

Cafe Flora

Directions Write a review Follow

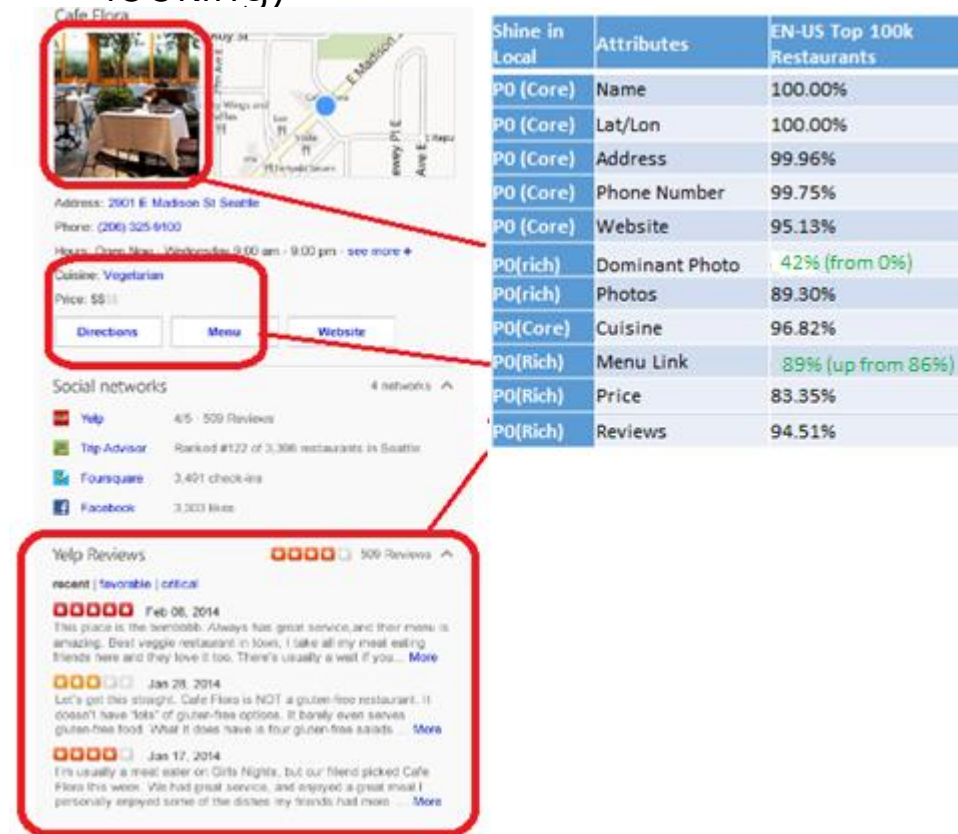
Address: 2901 E Madison St, Seattle, WA 98112
 Phone: (206) 325-9100
 Prices: \$\$\$\$
 Hours: 9:00 am – 10:00 pm
 Menu: allmenus.com

Reviews
 4.2 ★★★★★ 445 Google reviews

More reviews: zagat.com, judysbook.com, happycow.net, king5.com

Z Featured by Zagat
 Best-Buy Restaurants in Seattle
 See more from Zagat

Bing (forward looking)



Bing search results for Cafe Flora. The page includes a map, photos, and detailed information about the restaurant. A table of attributes is highlighted with a red box.

Shine in Local	Attributes	EN-US Top 100k Restaurants
P0 (Core)	Name	100.00%
P0 (Core)	Lat/Lon	100.00%
P0 (Core)	Address	99.96%
P0 (Core)	Phone Number	99.75%
P0 (Core)	Website	95.13%
P0(rich)	Dominant Photo	42% (from 0%)
P0(rich)	Photos	89.30%
P0(Core)	Cuisine	96.82%
P0(Rich)	Menu Link	89% (up from 86%)
P0(Rich)	Price	83.35%
P0(Rich)	Reviews	94.51%

Address: 2901 E Madison St Seattle
 Phone: (206) 325-9100
 Hours: Open Now, Wednesdays 9:00 am - 9:00 pm - see more +
 Cuisine: Vegetarian
 Price: \$\$\$

Directions Menu Website

Social networks 4 networks

- Yelp 4/5 - 509 Reviews
- Tap Advisor Ranked #122 of 3,306 restaurants in Seattle
- Foursquare 3,401 check-ins
- Facebook 3,203 likes

Yelp Reviews 509 Reviews

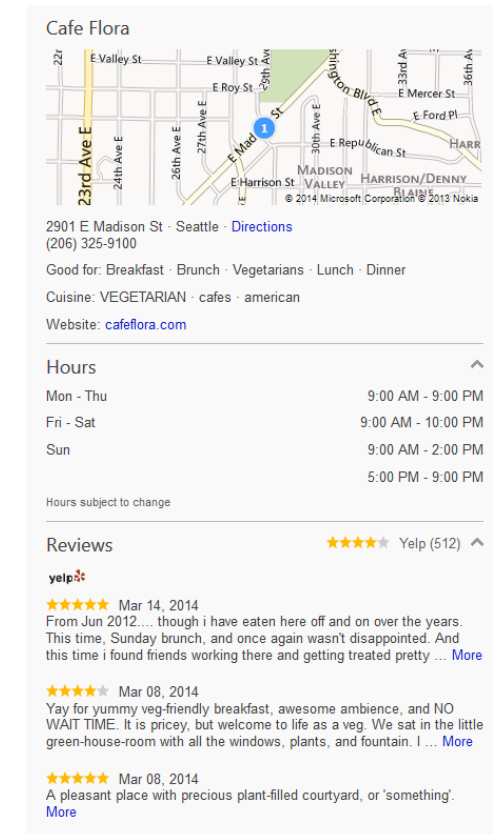
recent | favorable | critical

★★★★★ Feb 06, 2014
 This place is the bomb. Always has great service, and their menu is amazing. Best veggie restaurant in town, I take all my meal eating friends here and they love it too. There's usually a wait if you... More

★★★★ Jan 28, 2014
 Let's get this straight. Cafe Flora is NOT a gluten-free restaurant. It doesn't have "lots" of gluten-free options. It barely even serves gluten-free food. What it does have is four gluten-free salads... More

★★★★ Jan 17, 2014
 I'm usually a meat eater on Girls Nights, but our friend picked Cafe Flora this week. We had great service, and enjoyed a great meal. I personally enjoyed some of the dishes my friends had more... More

Bing Current



Bing Current search results for Cafe Flora. The page includes a map, photos, and detailed information about the restaurant.

Cafe Flora

2901 E Madison St · Seattle · Directions
 (206) 325-9100

Good for: Breakfast · Brunch · Vegetarians · Lunch · Dinner
 Cuisine: VEGETARIAN · cafes · american
 Website: cafe flora.com

Hours

Mon - Thu	9:00 AM - 9:00 PM
Fri - Sat	9:00 AM - 10:00 PM
Sun	9:00 AM - 2:00 PM 5:00 PM - 9:00 PM

Hours subject to change

Reviews ★★★★★ Yelp (512)

★★★★★ Mar 14, 2014
 From Jun 2012... though i have eaten here off and on over the years. This time, Sunday brunch, and once again wasn't disappointed. And this time i found friends working there and getting treated pretty... More

★★★★★ Mar 08, 2014
 Yay for yummy veg-friendly breakfast, awesome ambience, and NO WAIT TIME. It is pricey, but welcome to life as a veg. We sat in the little green-house-room with all the windows, plants, and fountain. I... More

★★★★★ Mar 08, 2014
 A pleasant place with precious plant-filled courtyard, or 'something'. More

Restaurant Image Ranker

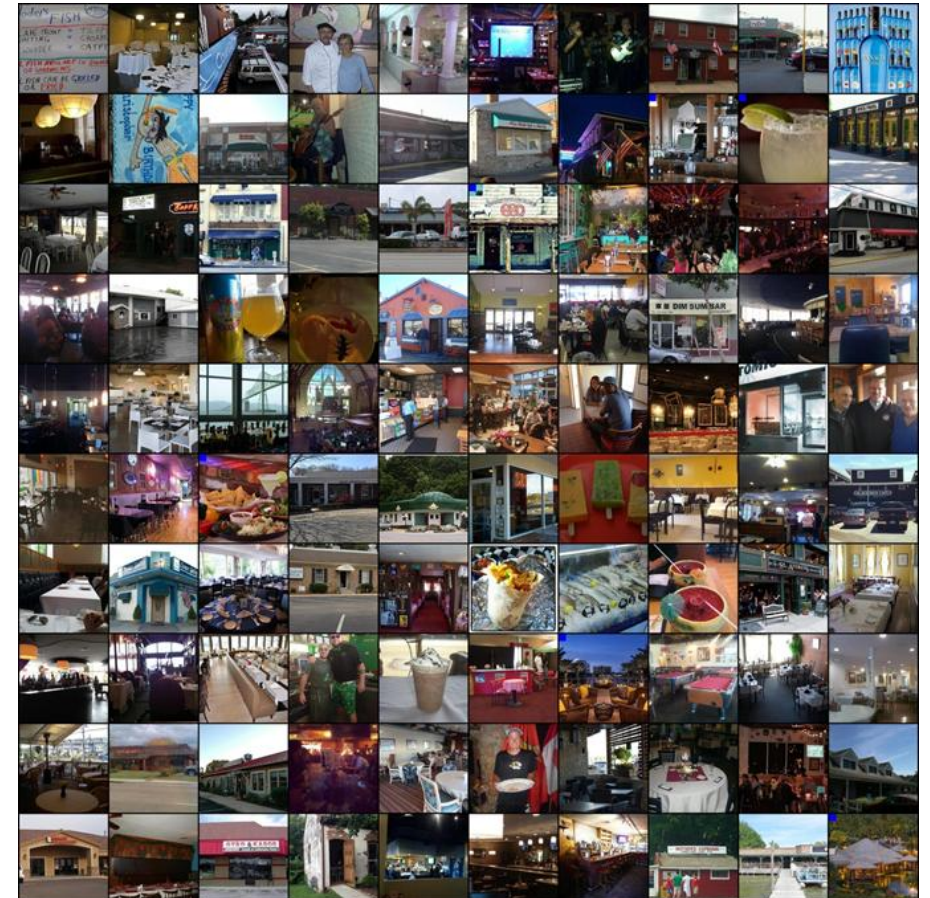
Fast Rank Model over 52 features including

- DNN features
- # of Faces
- Adults
- Indoor/Outdoor
- OCR/Text region ratio for targeting menu images
- Foreground & Background dominant color
- Personal photo feature etc

100 most positive images by DNN.










100 most negative images by DNN.



Restaurant Wins Competitor

Local results for restaurants in seattle [Larger map](#) Best match ▾ Cuisine ▾ Rating ▾ Price ▾ Hours ▾ Features ▾

 <p>Pike Place Chowder ★★★★★ Yelp (7304) Seafood, Soup · \$\$ · Downtown These 13 Restaurants In Washington Have The Best Seafood...</p>	 <p>Paseo ★★★★★ Yelp (5031) Caribbean · \$\$ · Fremont Where to Enjoy Cheap Eats in Seattle</p>	 <p>Shiro's Sushi Restaurant ★★★★★ Yelp (2158) Sushi · \$\$\$ · Belltown 10 Restaurants Bill Gates Has Been Spotted</p>	 <p>Von's 1000 Spirits ★★★★★ Yelp (1563) American · \$\$ · Downtown The Female Bartenders You Need to Know in Seattle</p>	 <p>Tacos Chukis ★★★★★ Yelp (1662) Mexican · \$ · Capitol Hill Tacos in Seattle: 12 to Try Now</p>	 <p>Salumi ★★★★★ Yelp (1364) Italian · \$\$ · Pioneer Square Seattle's Best Cheap Eats</p>	 <p>Il Corvo Pasta ★★★★★ Yelp (1303) Italian · \$\$ · Pioneer Square Seattle's Best Cold-Weather Noodles</p>
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Shiro's Sushi Restaurant

Cuisine: Sushi, Japanese

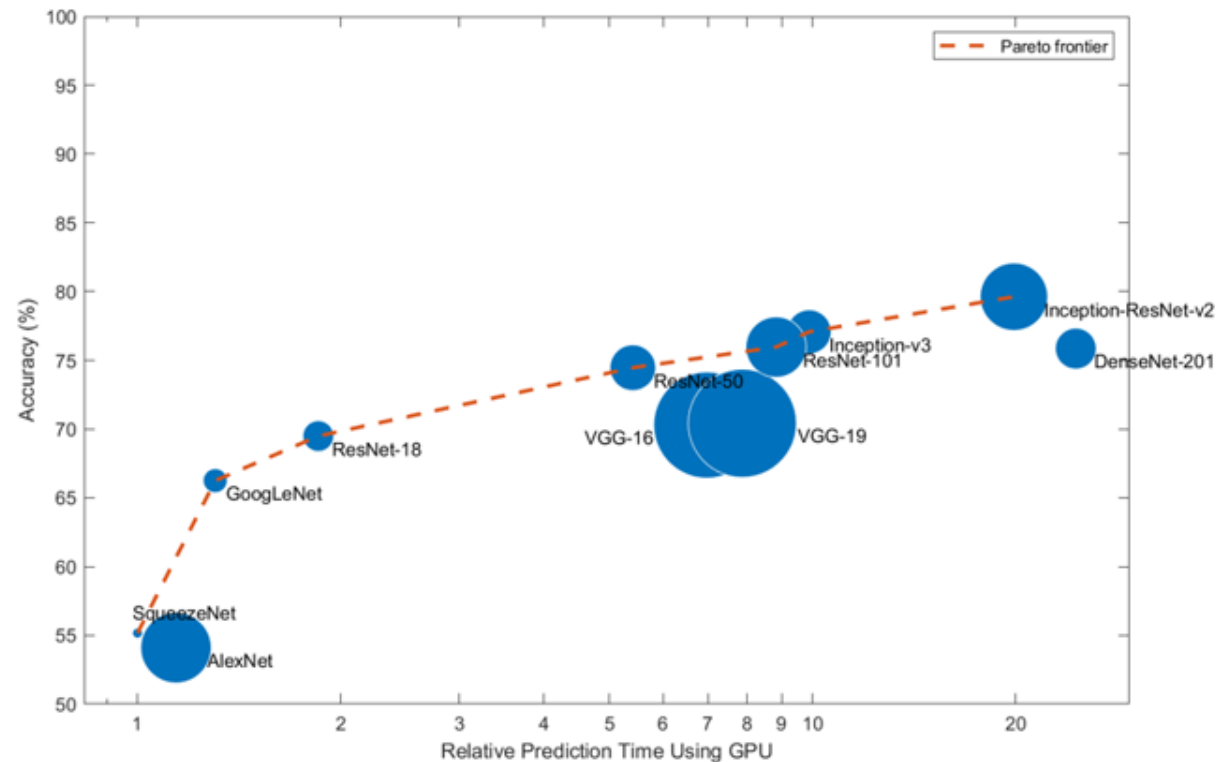
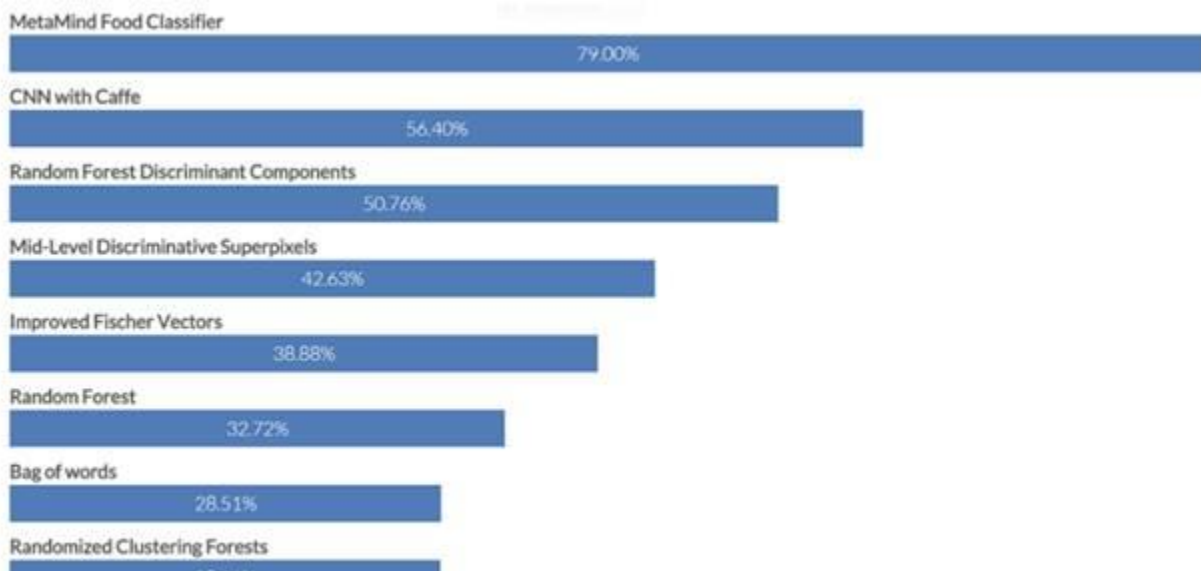
Local Image Understanding-Starting from Food ImageNet

The Food-101 Data Set



We introduce a challenging data set of 101 food categories, with 101'000 images. For each class, 250 manually reviewed test images are provided as well as 750 training images. On purpose, the training images were not cleaned, and thus still contain some amount of noise. This comes mostly in the form of intense colors and sometimes wrong labels. All images were rescaled to have a maximum side length of 512 pixels.

-101/



Review Insight From Restaurant – Menu Favorite

- Extract dish mentions from review and rank dish by positive mentions
- Algo:
 - Semi CRF tagger with brown clustering, word2vec encoding, and 300+ lexicon features
 - Sentiment++ pipeline.
 - KL sum to select representative reviews



John Howie Steak

At: The Shops At The Bravern

Cuisine: Steak, American

Reservations: Reservations

Favorites

Shrimp

starters, bar snacks, HAPPY HOUR AFTER, starters, starters, bar), sweet baby shrimp, butter, white wine, habanero sauce, sliced abatta bread



Reviews that mention this item

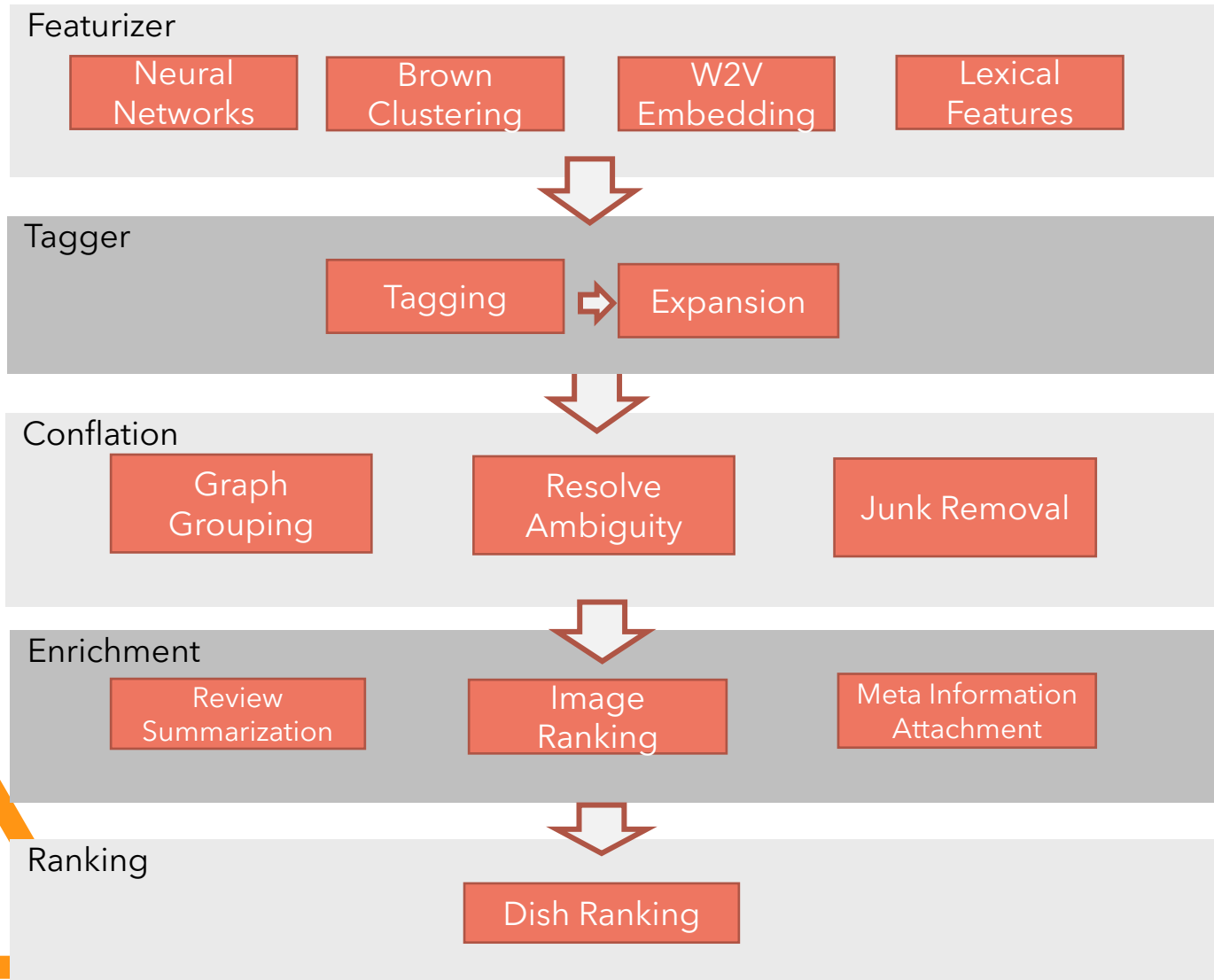
★★★★★ Mar 15, 2017

And the update is just as good as the original review! I absolutely love John Howie's happy hour. It's everyday from 3-6pm and they also have a late night happy hour. The selections they have on their... [Full review](#)

★★★★★ Jul 20, 2016

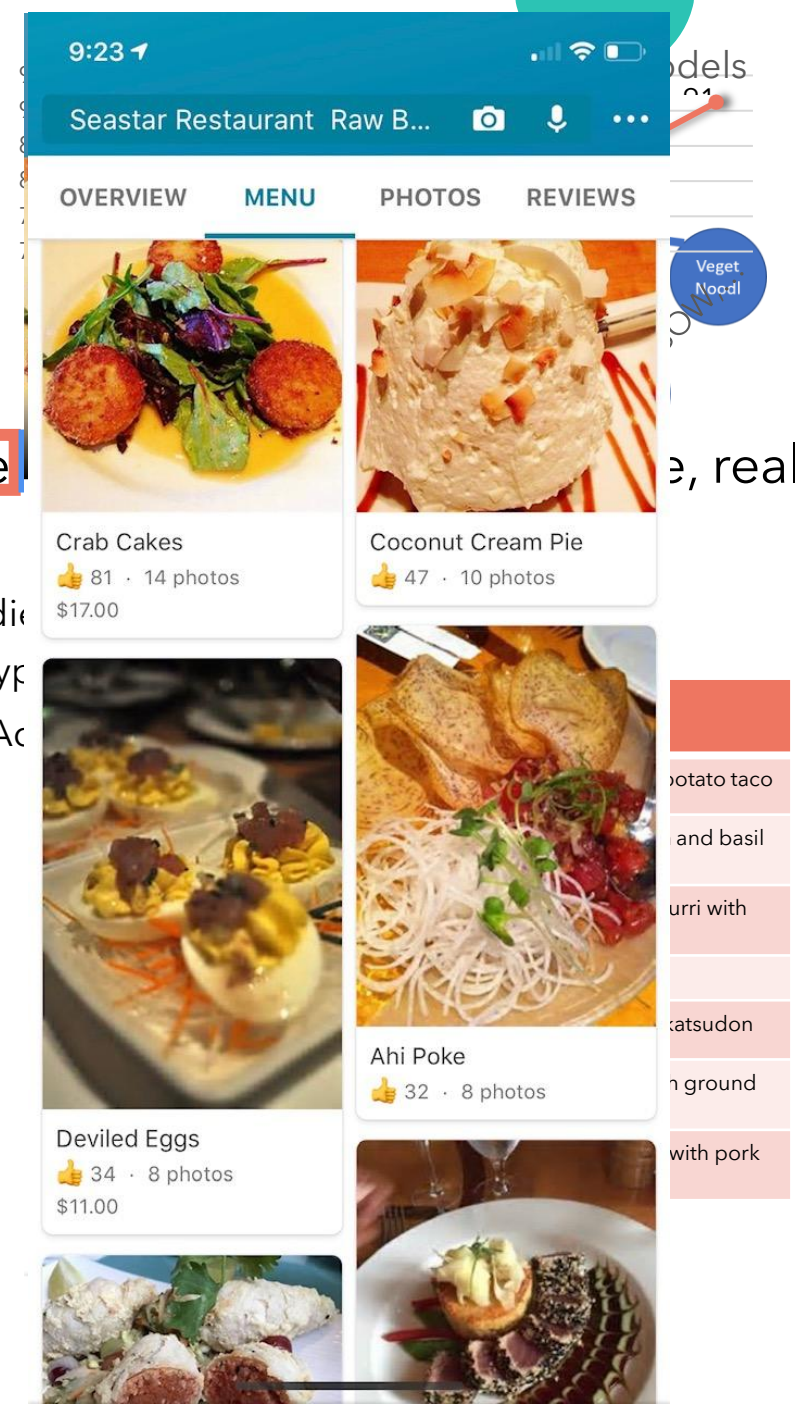
Happy Hour at John Howie is possibly the best happy hour in the country. The bar area is sleek and stylish and the happy hour/bar menu can't be beat. The **Spicy Habanero Butter Shrimp** is a fantastic!... [Full review](#)

Dish Page Pipeline



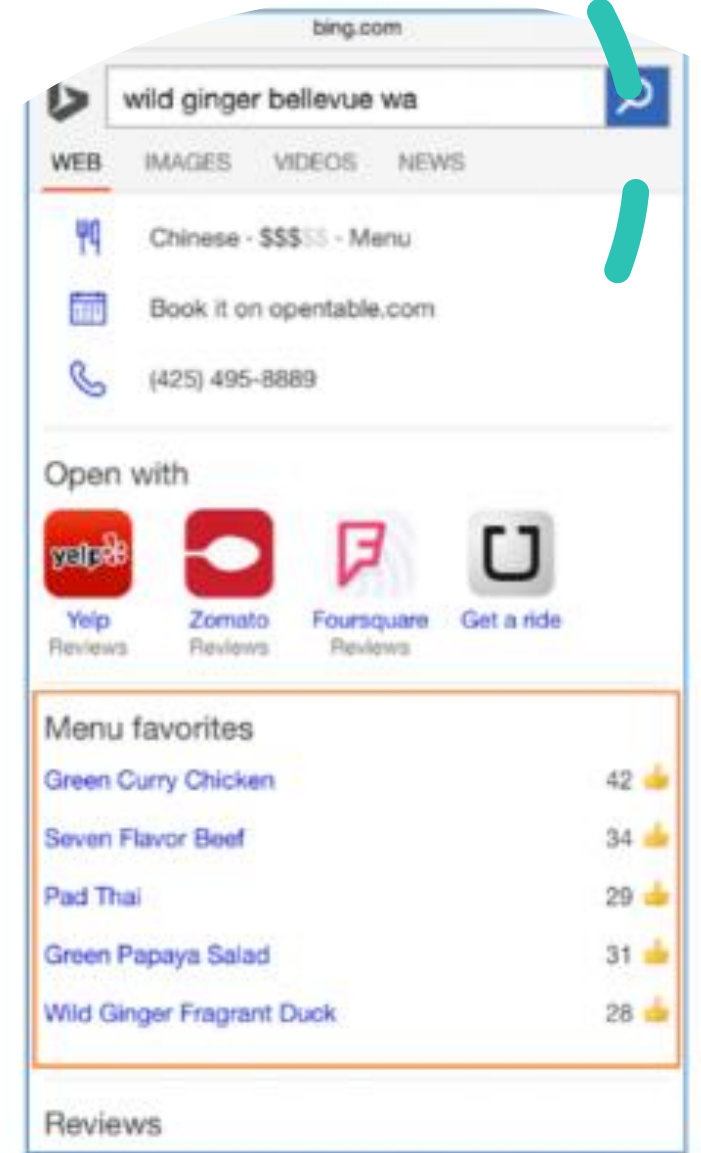
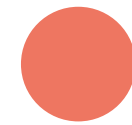
Chicke

- Ingredient
- Dish type
- Prep/Action



Media Coverage

- <https://searchengineland.com/bings-new-menu-favorites-feature-recommends-dishes-based-on-user-reviews-238155>
- <https://www.onmsft.com/news/bing-adds-menu-favorites-mobile-search-results-restaurants>
- <https://mspoweruser.com/check-out-the-new-menu-favorites-feature-in-bing/>
- <https://blogs.bing.com/search/2015/12/10/discover-menu-favorites-with-bing/?fbclid=IwAR3sT2eLSJtc-I9INFZPpLO5klFn-joZaYcLCN5FM5hUAq1LnkHbGJCazDo>
- [Bing Blogs](#)
- [Win Beta](#)
- [Windows Central](#)
- [Checked](#)



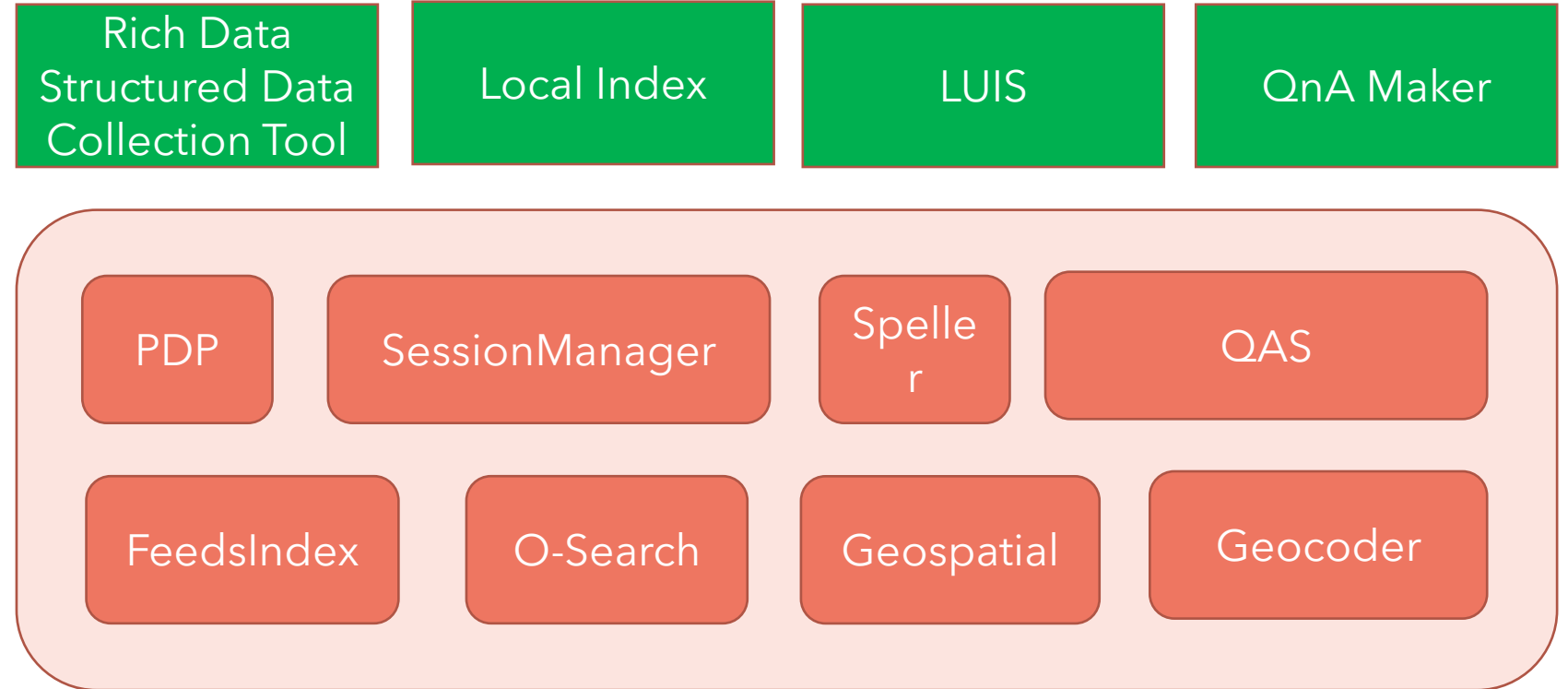


eCommerce Innovation

Bing Chat Bot

Bing Business Bot in 2017

- Connect business owner with users.
- Answer quick questions from structured data
- Relay unanswered questions to business owners.



Bing Local QU & Bing Local Search API/Workflow

Bing Hackathon Winner



98 Bot ideas submitted in total around the world...
200+ hackers registered!



Winners

[Bing Local Bot as a Service](#)

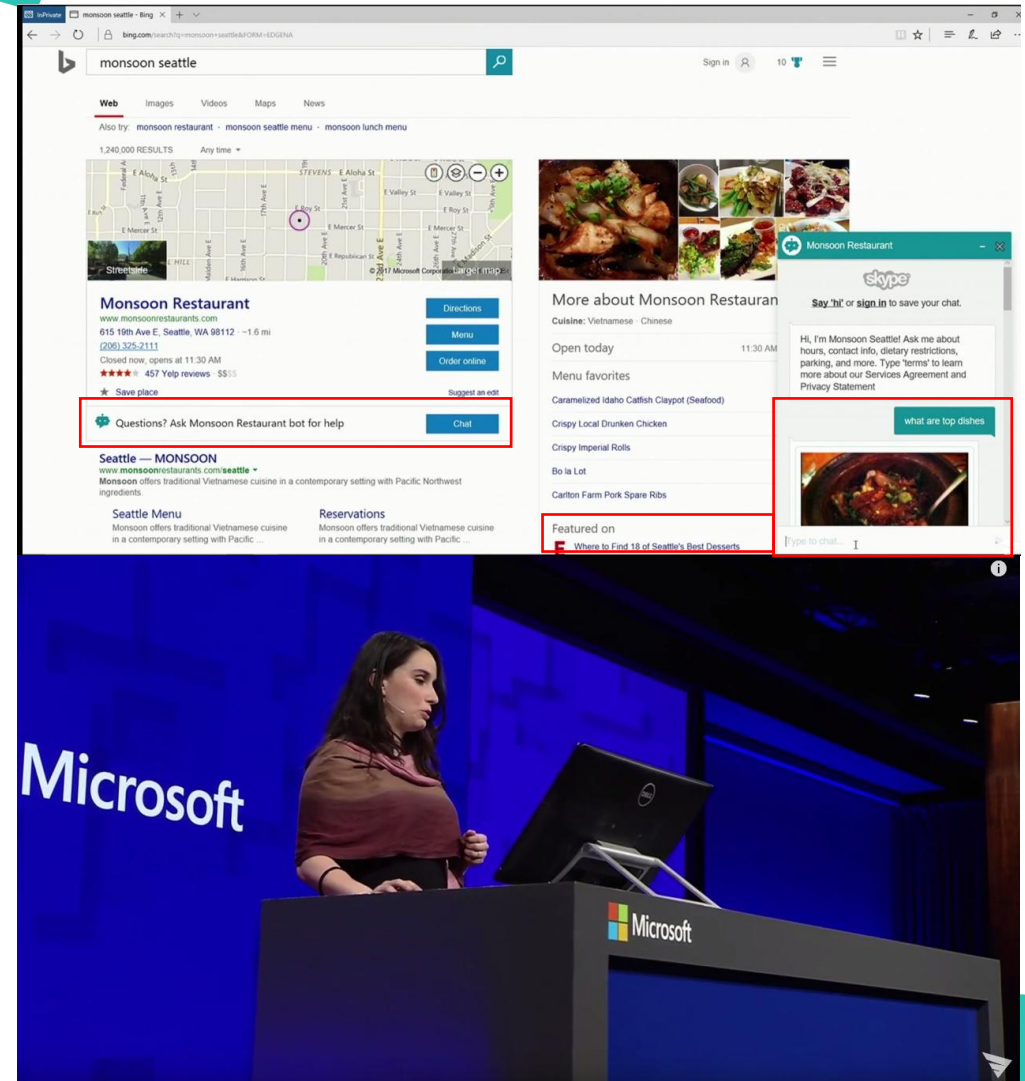
Raghavan KL, Srikanth Kamath

[Bing Q&A Bot for Local Business](#)

Leon Xu, Amit Bhatnagar, Xiaoqiu Huang, Shengdong Tang, Ashley Song

Bot Mentioned in //Build 2017

- https://www.theverge.com/2017/5/4/15545096/microsoft-bing-bots-build-2017?fbclid=IwAR0d5_nSW2x0vI_GfgQEYjR5NDILAIO7CvgtxWJzXzb29CWROMtA0BI-8ku8
- <https://venturebeat.com/2017/05/22/microsoft-is-helping-restaurants-cook-up-their-own-bots/>



QnA



The Shameful Tiki Room

Reviews ★★★★★ Yelp (206)



Recent · Favorable · Critical

★★★★★ Jan 14, 2020 10:15 AM
Terrible food, bad service, and extremely dark ambiance. Had to use my phone flash light to read the menu. Place has a lot of potential, but it was just bad over all. [Full review](#)

★★★★★ Jan 8, 2020 6:18 PM
This has become one of my favourite bars - the cocktails are amazing and the food is tasty! everything is made in house and you can really tell by how good the drinks taste. One of the best Pina Colad... [Full review](#)

★★★★★ Jan 3, 2020 10:34 AM
I have been to this place for the first time last week, and was so impressed by the way it looked inside. I was wondering why didn't I find this jewel of a bar/polynesian restaurant before. never the ... [Full review](#)

[See all 206 Yelp reviews](#)

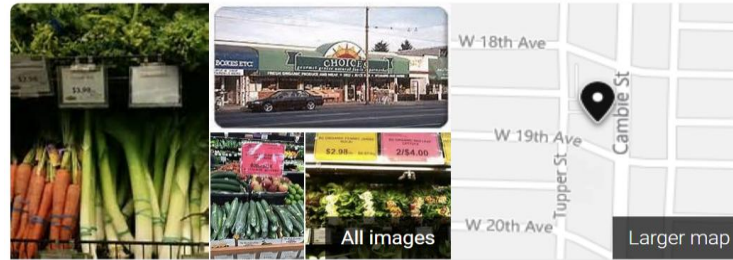
Questions & Answers

Q : What should I know about making a reservation?

A : We take reservations in Toronto! Reservations are not accepted after 2pm on the same day. For reservations...[Read more](#)

[See 1 question](#)

Data from: Web



Choices Market

★★★★★ 31 Yelp reviews

[Directions](#) [Website](#)

Address: 3493 Cambie St, Vancouver BC V5Z 2W7

Phone: +1 604-875-0099

Hours: Open · Closes 11:00 PM ▾

[Suggest an edit](#) · [Your business? Claim now](#)

[Been here? Tell us about it](#)

Questions & Answers

Q : Are all of the products sold at Choices Market stores available on your online store?

A : No. At this time, we are only able to offer select products on our online store versus our physical store. We have tried to make our most popular...[Read more](#)

[See all 2 questions](#)

Data from: Web

User reviews

★★★★★ (31)



DOGSTYLER Soest

[Directions](#) [Website](#)

Address: Werlerlandstr. 213 · 59494 Soest

Phone: 02921 9447620

Hours: Closed · Opens 10:00 ▾

[Suggest an edit](#) · [Your business? Claim now](#)

Questions & Answers

Q : Worin unterscheiden sich die unterschiedlichen Serien (Earl, Landart, Excelsior etc.)

A : Die unterschiedlichen Serien der DOGSTYLER® Produkte unterscheiden sich in...[Read more](#)

[See all 5 questions](#)

Data from: Web

Reviews from the Web

11880.com

4,2/5 71 reviews

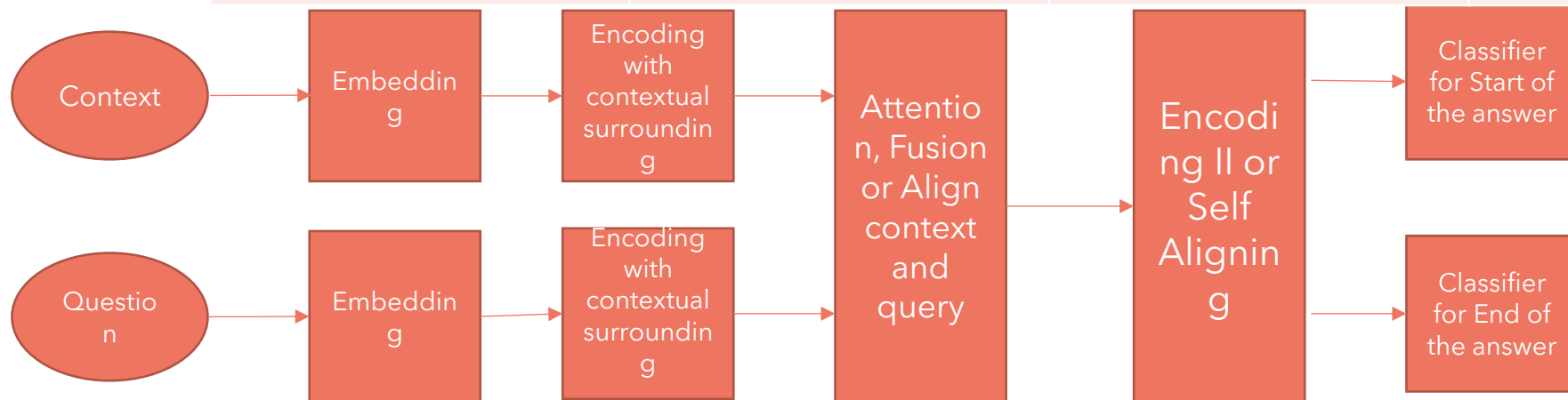
Photos

4 photos



Model

	DrQA	RMN	QANet
	3 layer bi-LSTM with attention using 128 hidden units.	Reinforced Mnemonic Reader	
Embedding	Glove + POS+NEF+RF	Glove+EM+POS+NER+T F+QC (Query category)	Glove
Encoding	BiLSTM	BiLSTM	CNN
Alignment Attention	Context-Query Attention	Bi-Attention	Dynamic Co-Attention
Encoding and Self Alignment	BiLSTM	Iterative BiLSTM	CNN
Classifier	Softmax Classifier on EM (exact match)	Softmax Classifier with reinforcement learning on F1 score	Softmax Classifier on EM

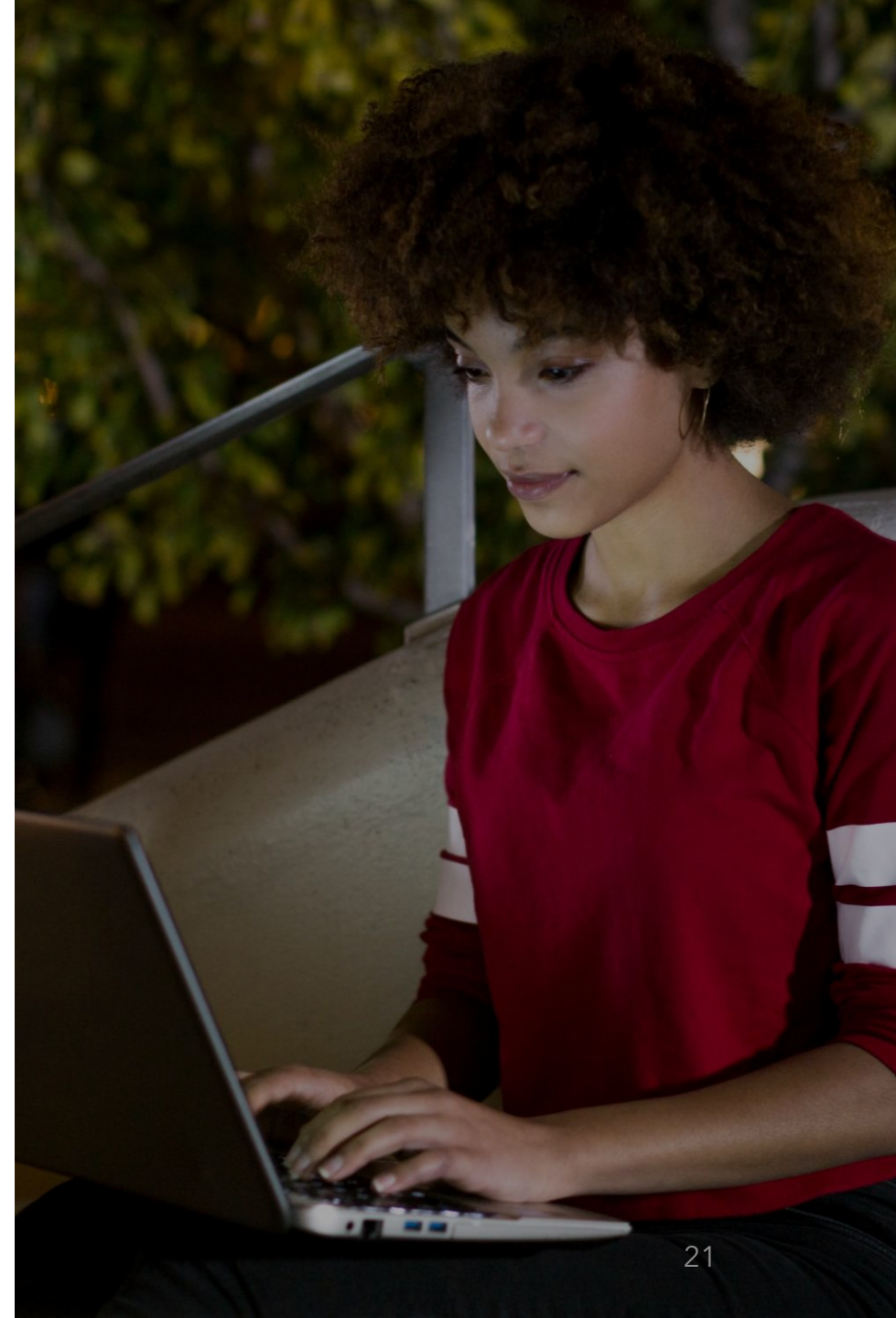
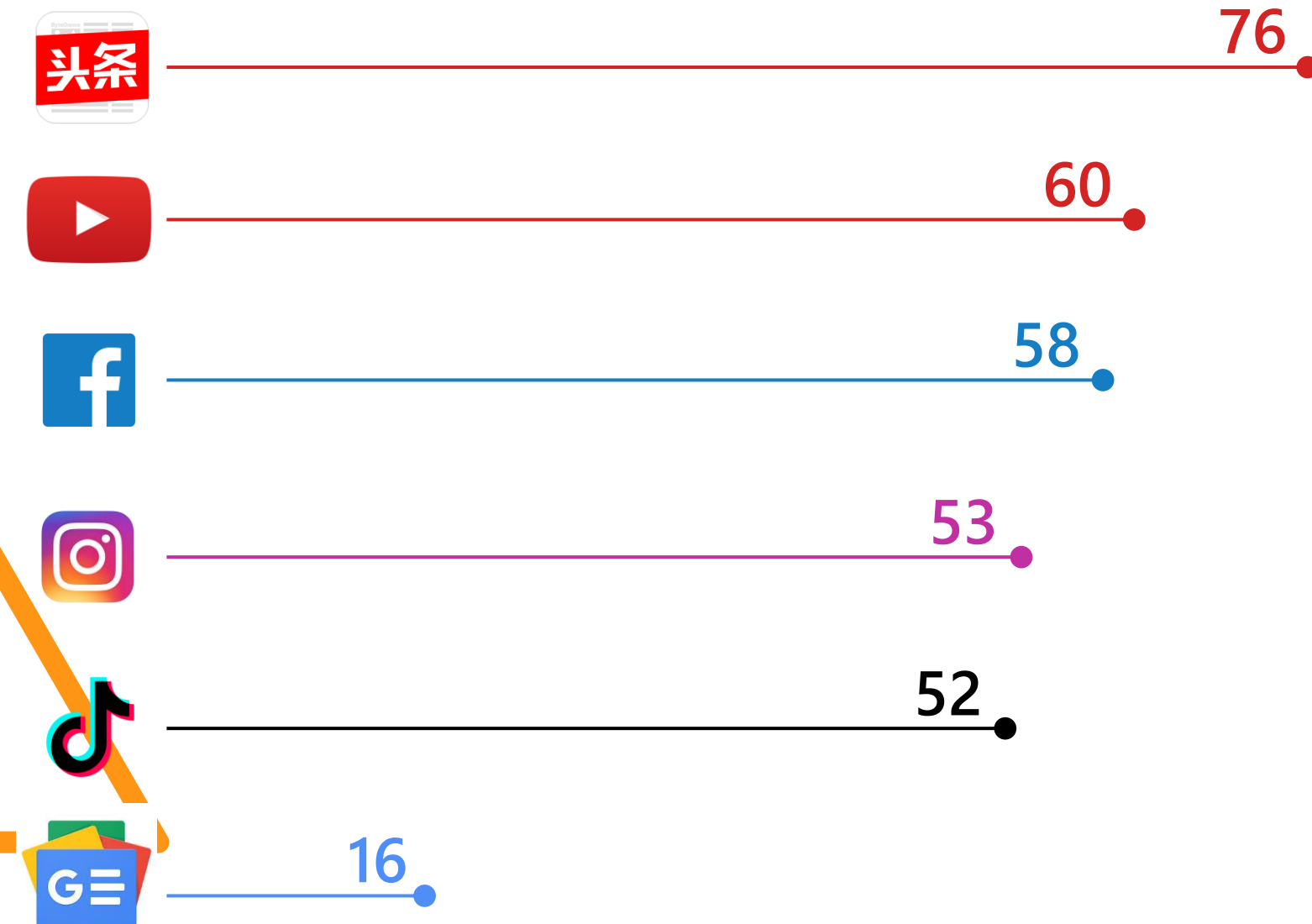




Companion AI

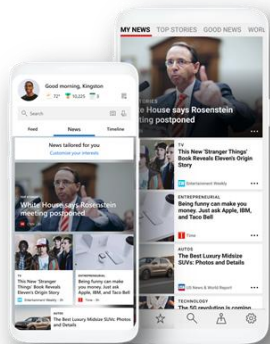
People Live in Their Feeds

Average # of daily minutes usage per user for top feeds apps



Global Distribution

1st Party and 3rd party eco systems



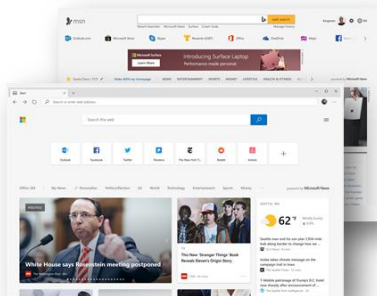
Mobile App & Microsoft Launcher



Bing



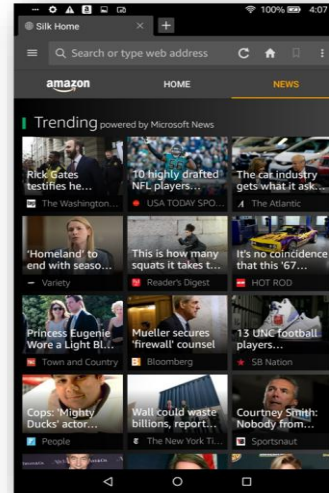
Windows Lock Screen



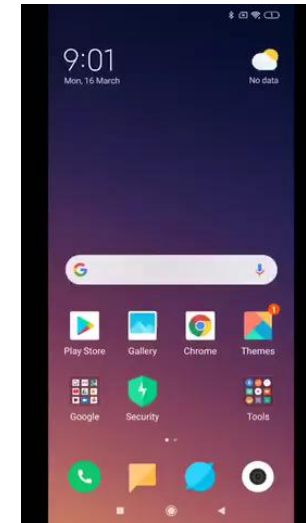
MSN & Edge

1st party

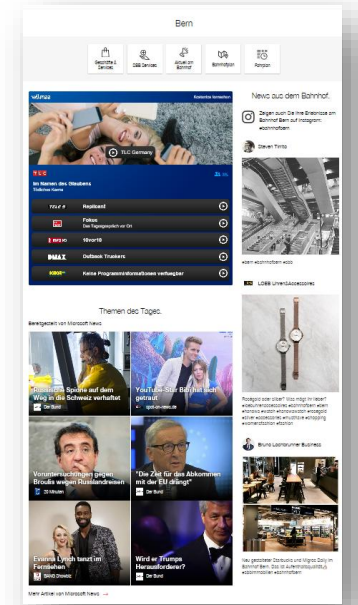
3rd party



Browsers



-1 screen



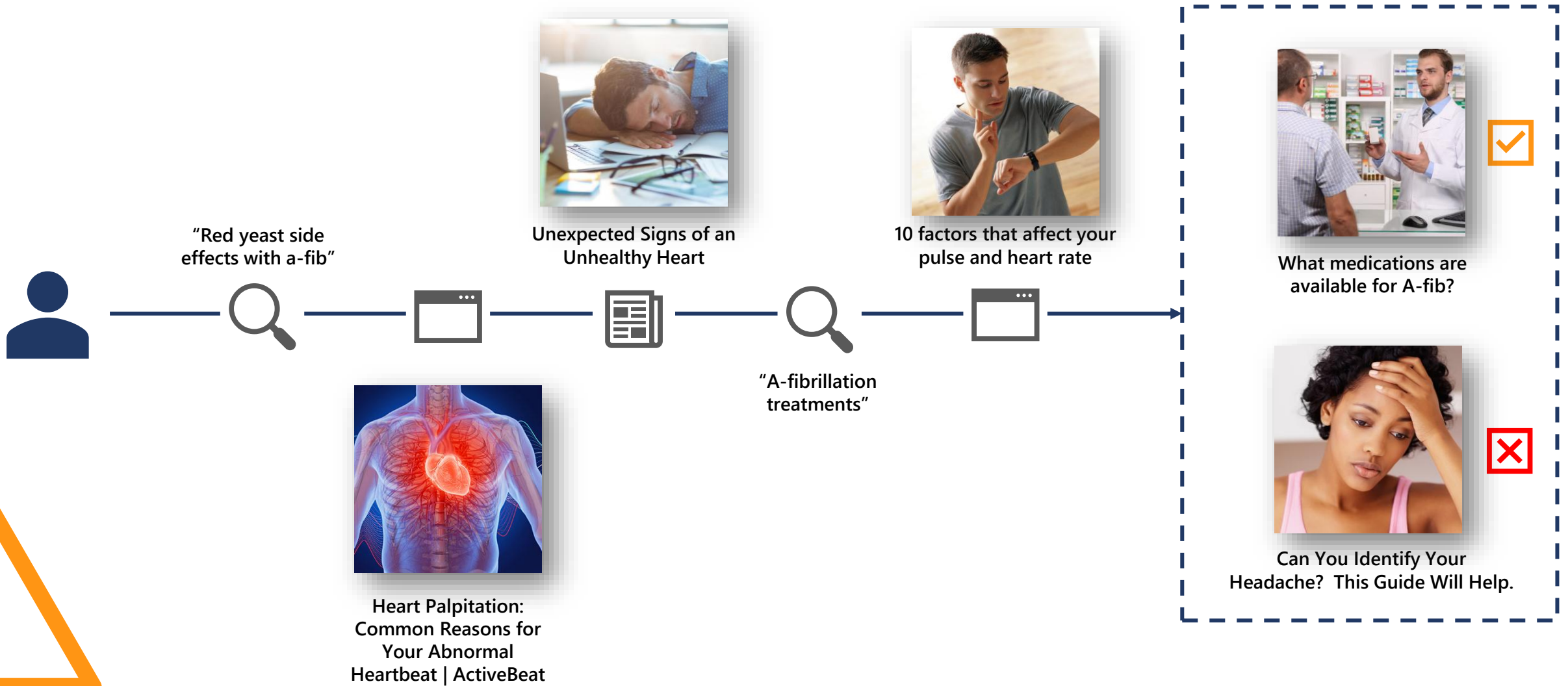
Web widget



Coming soon



UniUM with Multi-Platform Sequential User Activities

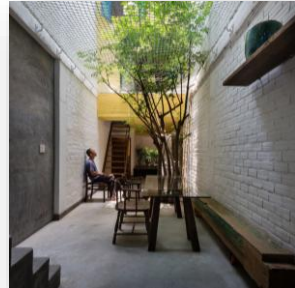


UniUM with Multiple User Feedback

Interested in exercise

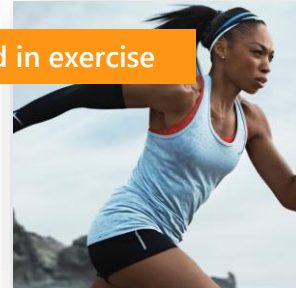


12 Bodyweight Exercises for a Strong Back



Compact House in Vietnam Contains Planted Courtyard

Interested in exercise



The Best Full Body Workout You Can Do Anywhere



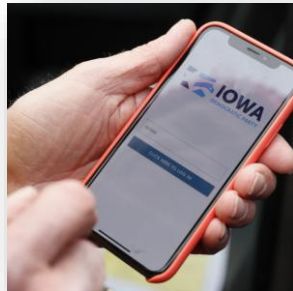
10 Equipment-Free Moves for Your Upper Body



Ruthless Nadal Crushes Carreno Busta to Reach Last 16



Iowa Caucus App Debacle: What Went Wrong?



Tennis Australia Unveils "Get Your Raquet On Via Landor



Not interested in tennis

HPE Says Kubernetes Runs Better on Bare Metal



Optimizing for Diversity

Comparison of the top 5 recommended items

UniUM with DPP

Mean relevance in list = .5658

ILAD = 0.4889

JALOPNIK

A Luxury Prerunner Like This Is Basically An Off-Road Supercar

Andrew P. Collins 5/5/2020

ET

Anthony Hopkins Does Drake's TikTok Dance Challenge and He's Got Moves

The Washington Post

Fauci puts it bluntly: Coronavirus deaths are undercounted

MR

1969 Ford Mustang Boss 429 once owned by Paul Walker is going to auction

CBS Los Angeles

To Mask Or Not To Mask? Face Covering Mandates Uncover Strong Opinions

Syndicated Local - CBS Los Angeles 5/12/2020

SIMI VALLEY (CBSLA) — Face coverings are not doing a good job of masking how strongly people feel about having to wear them.



UniUM without DPP

Mean relevance in list = .5901

ILAD = 0.3616

JALOPNIK

A Luxury Prerunner Like This Is Basically An Off-Road Supercar

Andrew P. Collins 5/5/2020

Automobile

This '68 VW Transporter Pickup With Porsche Livery Is One Cool Hauler

ET

Anthony Hopkins Does Drake's TikTok Dance Challenge and He's Got Moves

autoTRADER.ca

5-Year-Old Steals Mom's Car to Buy a Lamborghini

Jodi Lai 2020-05-05

autoblog

Toyota Prius 2020 Edition marks 20 years of sipping fuel with sportier looks

Sven Gustafson 5/11/2020





Coronavirus updates



michigan unemployment



Labor and Economic Opportunity - Unemployment Insurance Agency



When Is the Next Round of Stimulus Checks Going Out?



Coronavirus updates



Fix Ethernet Cable



ethernet cable crimping



Caring for Children in Group Settings during COVID-19



effects of children licking hand sanitizer - Bing



Hand Sanitizer Is Poisoning Kids

Recommendations

- Coronavirus Michigan, United States - live map tracker
- Michigan begins sending \$600 payments, sets date for expanded unemployment eligibility
- What's next from Congress in coronavirus stimulus legislation



- Keep Children Healthy during the COVID-19 Outbreak



- facts about river dolphin
- dolphin websites for kids
- pictures of dolphins for kids
- jello snack pack flavors
- how do you make finger jello
- women runners body pictures
- weekly workout schedule for women
- beginner dumbbell workout for women

Recommendations



All About Dolphins for Kids: Dolphins for Children - FreeSchool

MAGIC FINGER JELLO



★★★★★ (1)

Recipe by KindergartenMom

READY IN: 2hrs 15mins

SERVES: 10-12

DIRECTIONS

YIELD: 1 8x8 pan

UNITS: US

Dissolve unflavoured gelatin in one cup of cold water. Set aside.

INGREDIENTS

Nutrition

2 (1 tablespoon) packages unflavored gelatin

In saucepan bring one cup of water to a boil and add Jello. Bring back to a boil and then remove from heat.

1 (6 ounce) package Jello gelatin

Add gelatin mixture to hot Jello mixture. Stir and add 1/2 cup cold water.

2 1/2 cups water

Pour into a greased pan, cover with plastic wrap, and set aside in fridge until solid.

CREATE A SHOPPING LIST

VIEW LIST

Share your list or take it in-store

ADD TO SHOPPING LIST

Cut into squares or use cookie cutters to make interesting shapes.

Store in an airtight container in the fridge.

Powered by Whisk.com

Note: each season it's fun to make these different colours and shapes. In our family we make green and red salsa. *Elaine at Paradise at*

- How to Get a Runner's Body | Livestrong.com
- The Complete 4-Week Beginner's Workout Program



homemade mother's day gift ideas

UET

Gifts For Her | Unique beauty gift ideas | L'Occitane

UET

On a budget?
5 handmade gift ideas that you can make for your mom



Coronavirus symptoms:
CDC adds six symptoms for COVID-19

UET

Diane Gilman Women's Sweaters | HSN



Creative mother's day gift ideas

UET

10-piece Reader and Sun Reader Pack with Cases
Reviews & Ratings

Recommendation:

- 48 DIY Mother's Day Gifts That Are the Most Thoughtful Way to Say "I Love You"
- 14 Mother's Day Ideas to Make This Quarantine Holiday One to Remember
- Trump lays out new coronavirus testing 'blueprint' as states weigh reopening



Eyekepper 5-pack Spring Hinges 80's Reading Glasses Includes Sun Readers +1.25|Eyeglass Try On



DIY MOTHER'S DAY GIFTS YOU CAN MAKE AT HOME | 5 Dollar Tree DIY Mother's Day Gift Ideas 2020

Next: Agent & OpenSource

- [GitHub - microsoft/WindowsAgentArena: Windows Agent Arena \(WAA\) 🪟 is a scalable OS platform for testing and benchmarking of multi-modal AI agents.](#)

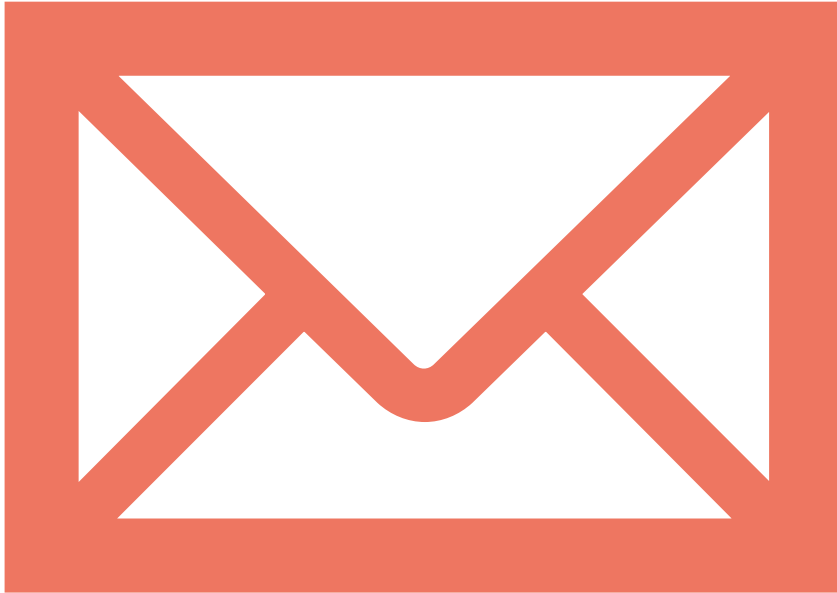


9/3/20XX

Presentation Title

33

Thank you



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- Email: liangxu@microsoft.com
- LinkedIn: <http://linkedin.com/in/liangxu>
- youtube: [Leon Xu -\(chaselight\)](#)
- leon.xu@gmail.com