

# AI, CLOUD AND THE CONVERSATIONAL WEB

**MICHAEL CHRISTEN**  
@0rb1t3r

# CONVERSATIONAL WEB

## TURN WEB FORMS INTO A CONVERSATION

**What's your name?**

**Occupation**

Developer

Designer

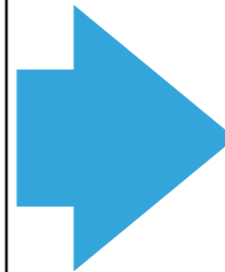
Curious mind

Lost cause

**Company**

**Will conversational interfaces be everywhere?**

**Email**

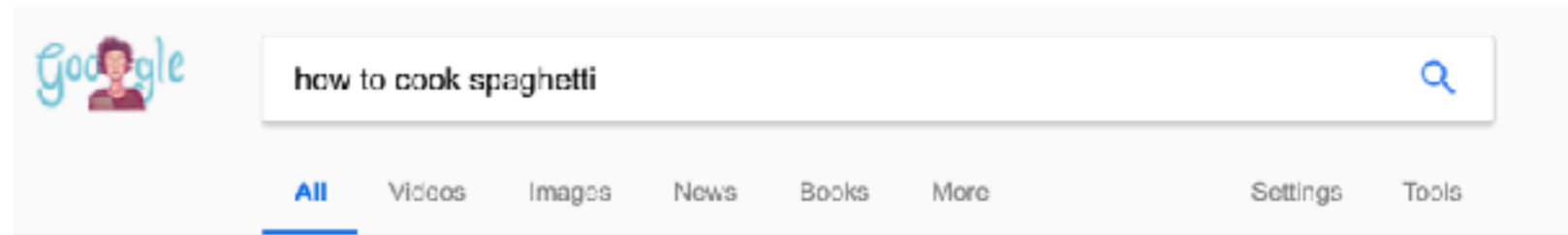


Disable Conversational Form

Hi there! What's your name? 🗨️

Type your answer here ...

# PEOPLE'S EXPECTATION ABOUT SEARCH ENGINE RESULTS



About 13,000,000 results (0.77 seconds)

## Follow These Steps

1. Boil water in a large pot. To make sure pasta doesn't stick together, use at least 4 quarts of water for every pound of noodles.
2. Salt the water with at least a tablespoon—more is fine. The salty water adds flavor to the pasta.
3. Add pasta. ...
4. Stir the pasta. ...
5. Test the pasta by tasting it. ...
6. Drain the pasta.



## How to Cook Pasta Video and Steps - Real Simple

<https://www.realsimple.com/food-recipes/cooking-tips-techniques/cooking/cook-pasta>

About this result Feedback

## People also ask

Do you have to rinse pasta after cooking it?

How do you cook spaghetti and sauce?

How do you make spaghetti?

How do you cook spaghetti in the microwave?

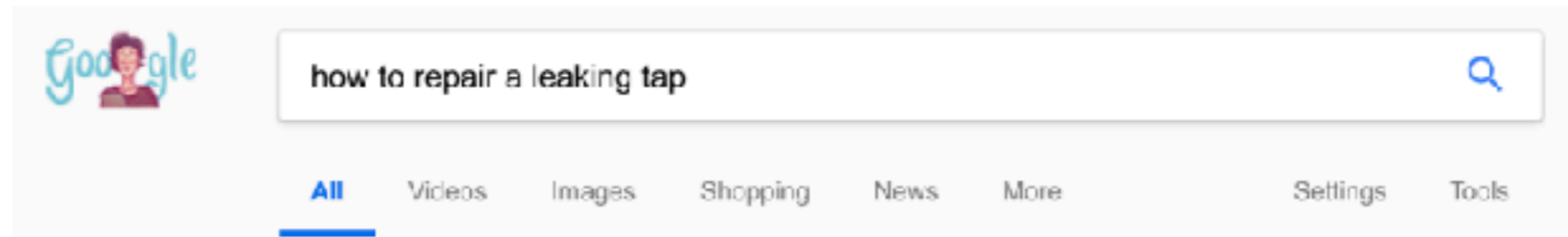
Feedback

## How to Cook Pasta Video and Steps - Real Simple

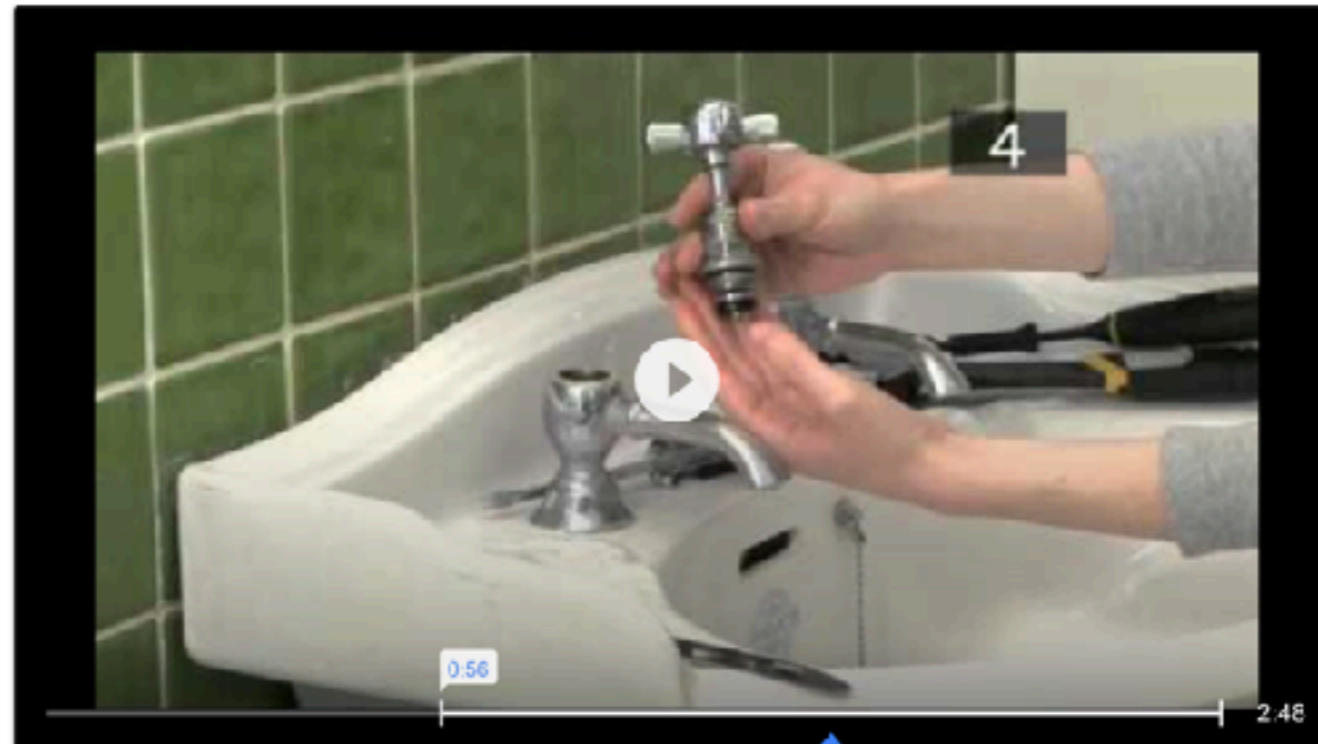
<https://www.realsimple.com/food-recipes/cooking-tips.../cooking/cook-pasta>

Follow These Steps. Boil water in a large pot. To make sure pasta doesn't stick together, use at least 4 quarts of water for every pound of noodles. Salt the water with at least a tablespoon—more is fine. The salty water adds flavor to the pasta. Add pasta. Stir the pasta. Test the pasta by tasting it. Drain the pasta.

# PEOPLE'S EXPECTATION ABOUT SEARCH ENGINE RESULTS



About 1,180,000 results (0.65 seconds)



Suggested clip · 1:12 seconds

**How To Fix A Dripping Tap (Bib Or Pillar) - YouTube**

<https://www.youtube.com/watch?v=tc7bNfPJhYM>

About this result Feedback

People also ask

How do you fix a dripping tap?

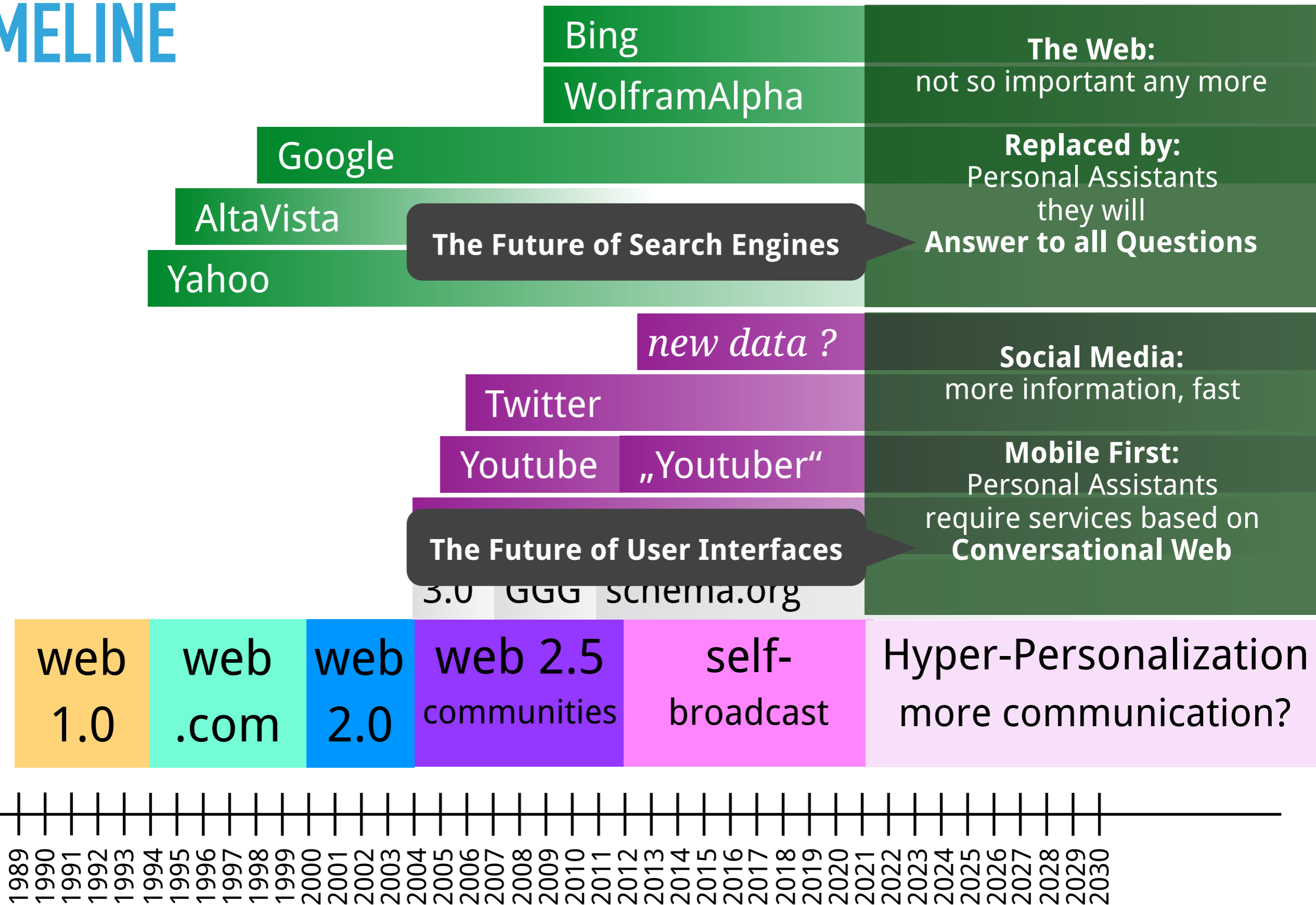
What is the cause of a dripping tap?

How do you stop a dripping tap?

How do you change a washer on a tap?

# CONVERSATIONAL WEB

## TIMELINE



# AI: DIGITAL PERSONAL ASSISTANTS

## DIGITAL PERSONAL ASSISTANTS IN VARIOUS SHAPES

SMART SPEAKER



GOOGLE, APPLE, AMAZON, MICROSOFT:  
WHERE IS A **FOSS** PERSONAL ASSISTANT?

GOOGLE HOME  
GOOGLE NOW

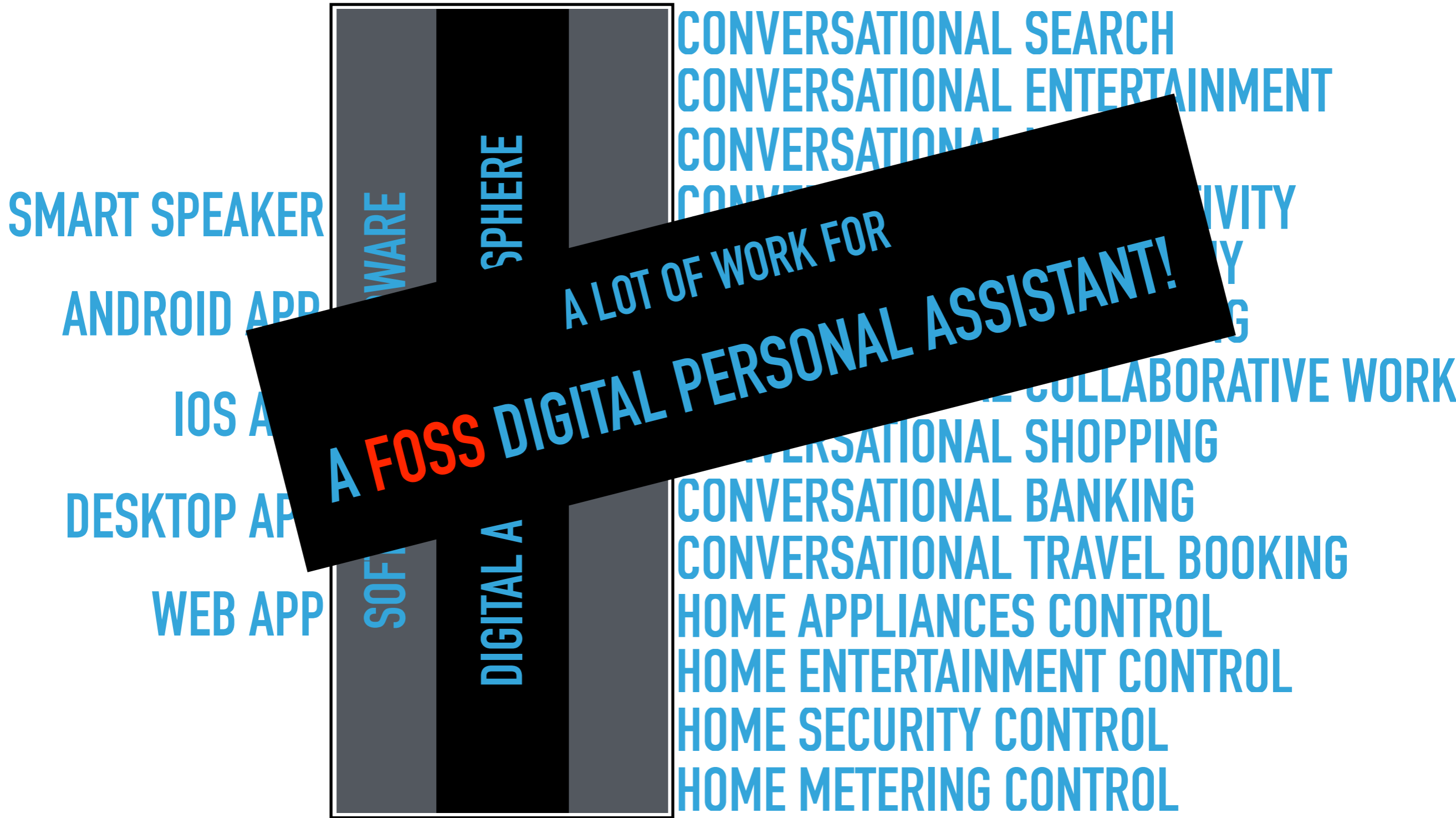
APPLE HOMEPOD  
SIRI

AMAZON ECHO  
ALEXA

HARMAN CARDON  
CORTANA

# AI: DIGITAL PERSONAL ASSISTANTS

## THE DIGITAL ASSISTANT ECOSPHERE



OPEN SOURCE WINS OVER PROPRIETARY EVERY TIME QUOTE FROM DAIMLER  
FOSSASIA 2017

## PROPRIETARY ECOSPHERE FOR DIGITAL ASSISTANTS

CLOSED  
APPLIANCES

CLOSED  
SOFTWARE

CLOUD DATA  
SERVICES

CLOUD HOSTING  
OF CUSTOMER  
SKILLS

STANDING ON  
SHOULDERS OF  
GIANTS

FREE AND OPEN  
SOFTWARE  
COLLABORATION

SELF- OR  
CLOUD HOSTING  
OF DATA  
SERVICES

WIKI-LIKE  
SKILL  
COLLABORATION

THE **FOSS** ECOSPHERE FOR DIGITAL ASSISTANTS



# OPEN SOURCE WINS OVER PROPRIETARY EVERY TIME

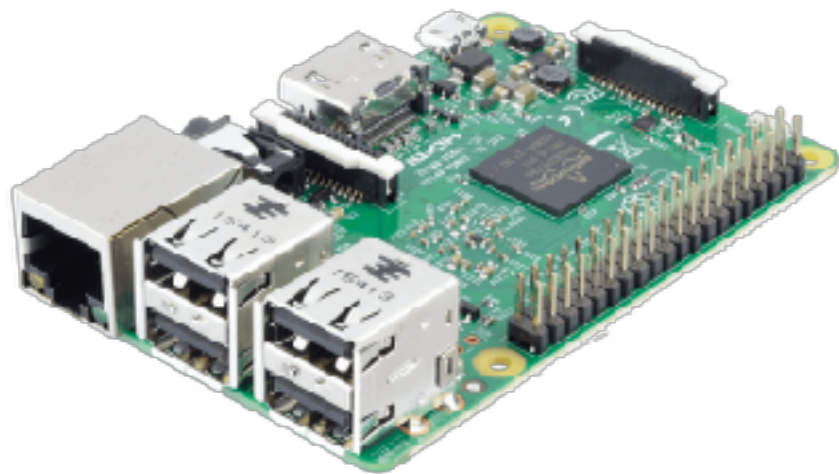
## THE **FOSS** ECOSPHERE FOR DIGITAL ASSISTANTS

STANDING ON  
SHOULDERS OF  
GIANTS

FREE AND OPEN  
SOFTWARE  
COLLABORATION

SELF- OR  
CLOUD HOSTING  
OF DATA  
SERVICES

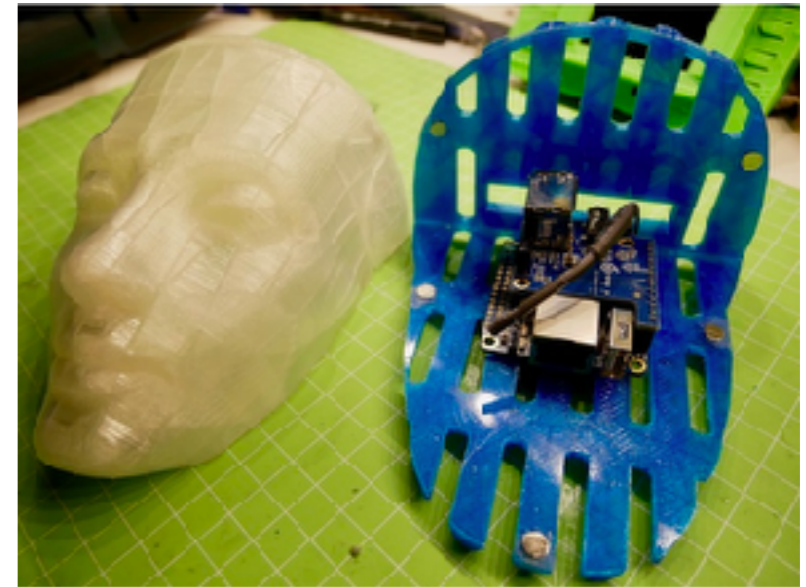
WIKI-LIKE  
SKILL  
COLLABORATION



+



+



# OPEN SOURCE WINS OVER PROPRIETARY EVERY TIME

## THE **FOSS** ECOSPHERE FOR DIGITAL ASSISTANTS

STANDING ON  
SHOULDERS OF  
GIANTS

FREE AND OPEN  
SOFTWARE  
COLLABORATION

SELF- OR  
CLOUD HOSTING  
OF DATA  
SERVICES

WIKI-LIKE  
SKILL  
COLLABORATION

**foss  
asia**

+



+

Google Summer of Code



# OPEN SOURCE WINS OVER PROPRIETARY EVERY TIME

## THE **FOSS** ECOSPHERE FOR DIGITAL ASSISTANTS

STANDING ON  
SHOULDERS OF  
GIANTS

FREE AND OPEN  
SOFTWARE  
COLLABORATION

SELF- OR  
CLOUD HOSTING  
OF DATA  
SERVICES

WIKI-LIKE  
SKILL  
COLLABORATION



THE WEB IS OUR DATA CLOUD

# OPEN SOURCE WINS OVER PROPRIETARY EVERY TIME

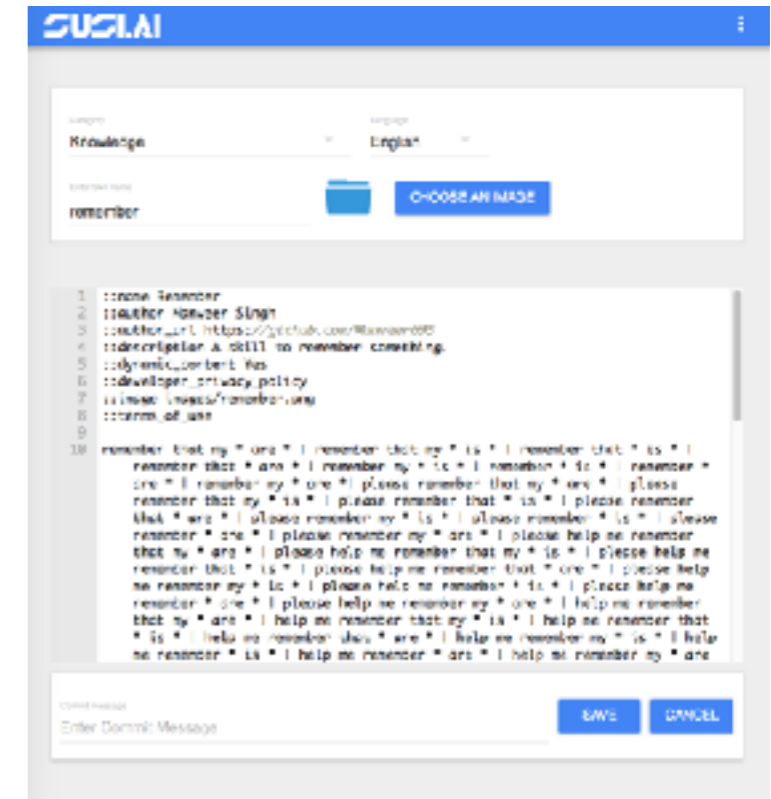
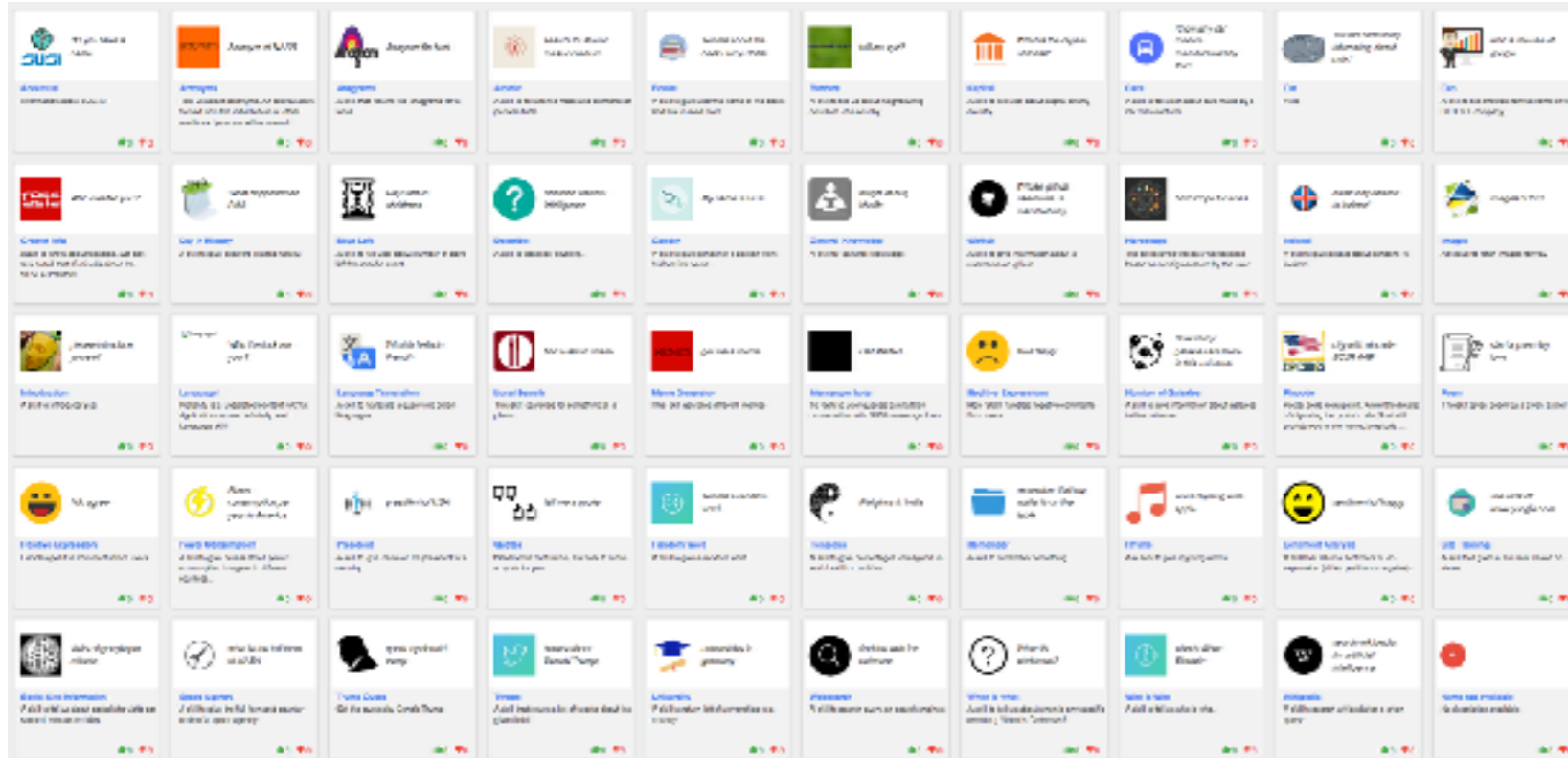
## THE FOSS ECOSPHERE FOR DIGITAL ASSISTANTS

STANDING ON SHOULDERS OF GIANTS

FREE AND OPEN SOFTWARE COLLABORATION

SELF- OR CLOUD HOSTING OF DATA SERVICES

WIKI-LIKE SKILL COLLABORATION



# THE **SUSI** ECOSPHERE FOR DIGITAL ASSISTANTS

SMART SPEAKER

ANDROID APP


IOS APP

DESKTOP APP

WEB APP

SOFTWARE & HARDWARE

Thingiverse

DASHBOARD 

EXPLORE

EDUCATION

CREATE



## Nefertiti Case for Raspberry Pi

by Orbiter, published Feb 12, 2018



# THE **SUSI** ECOSPHERE FOR DIGITAL ASSISTANTS

SMART SPEAKER  
ANDROID APP  
IOS APP  
DESKTOP APP  
WEB APP

**SOFTWARE & HARDWARE**



# THE **SUSI** ECOSPHERE FOR DIGITAL ASSISTANTS

SMART SPEAKER

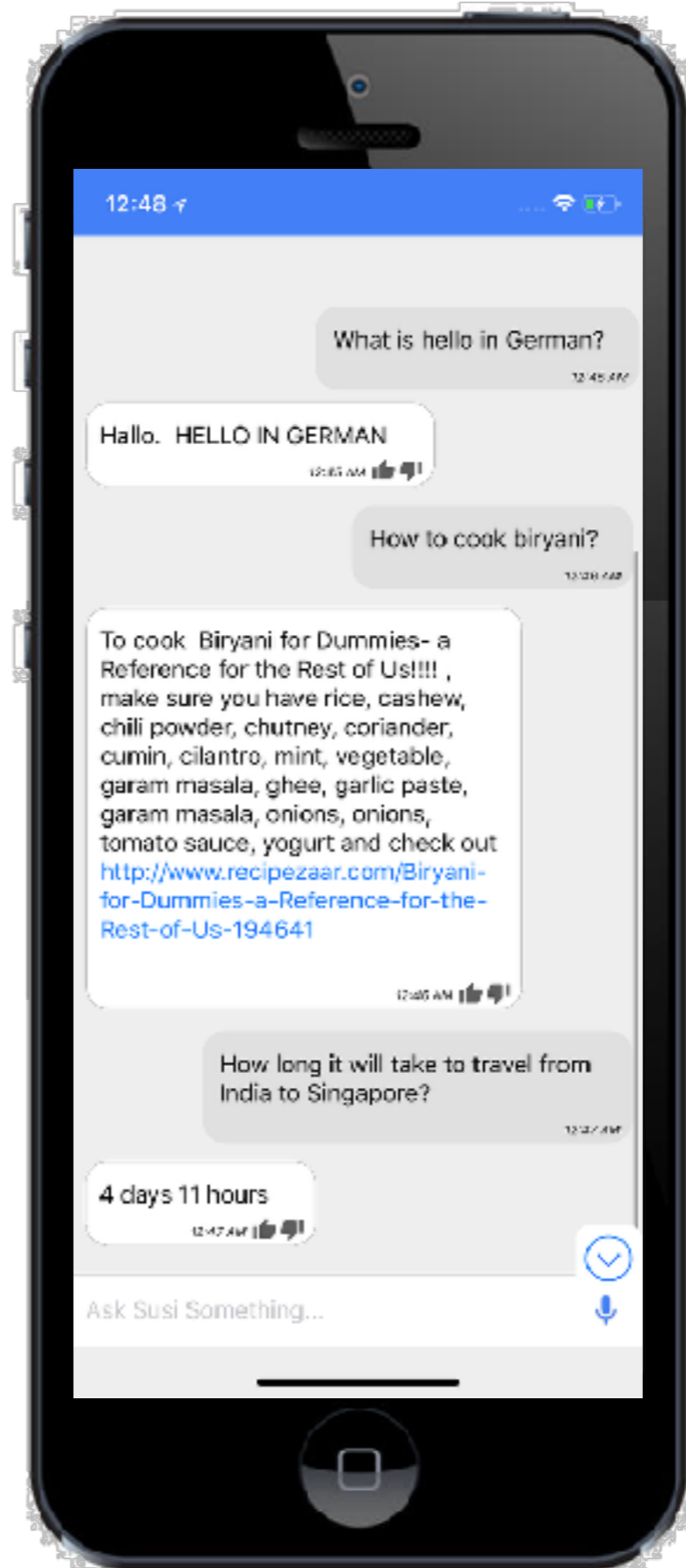
ANDROID APP

IOS APP

DESKTOP APP

WEB APP

SOFTWARE & HARDWARE



# THE **SUSI** ECOSPHERE FOR DIGITAL ASSISTANTS

SMART SPEAKER

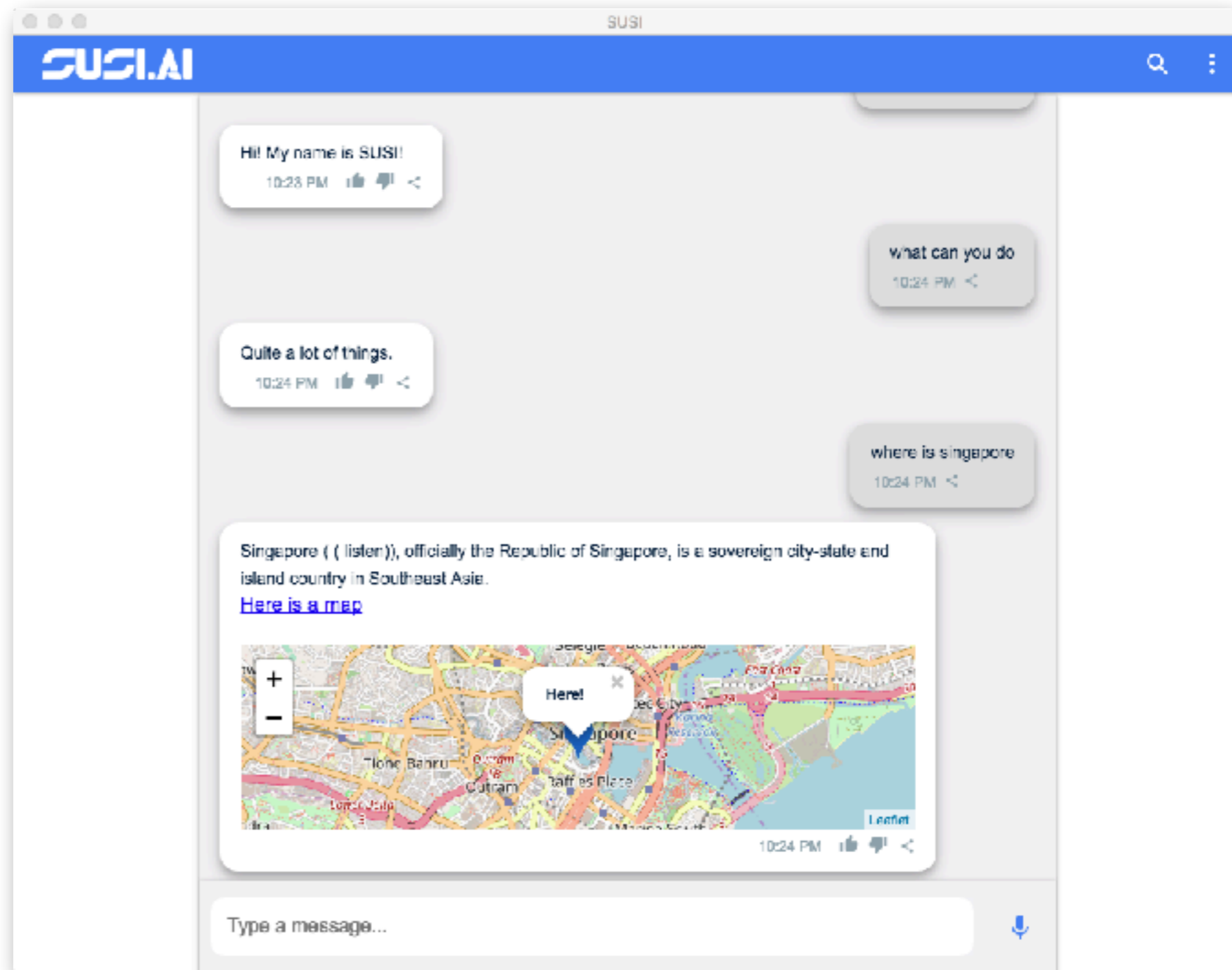
ANDROID APP

IOS APP

DESKTOP APP

WEB APP

SOFTWARE & HARDWARE





# THE **SUSI** ECOSPHERE FOR DIGITAL ASSISTANTS

SMART SPEAKER

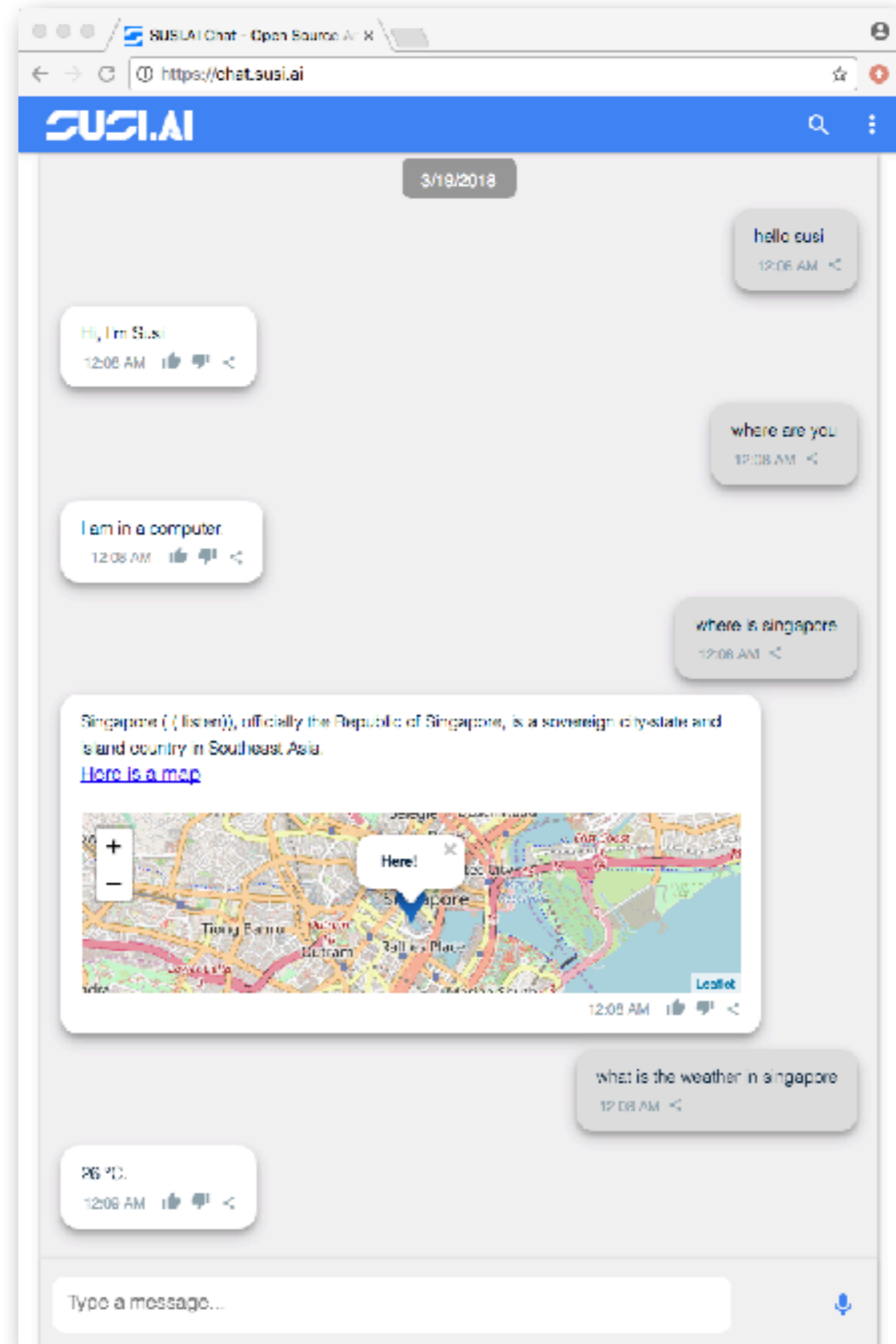
ANDROID APP

IOS APP

DESKTOP APP

WEB APP

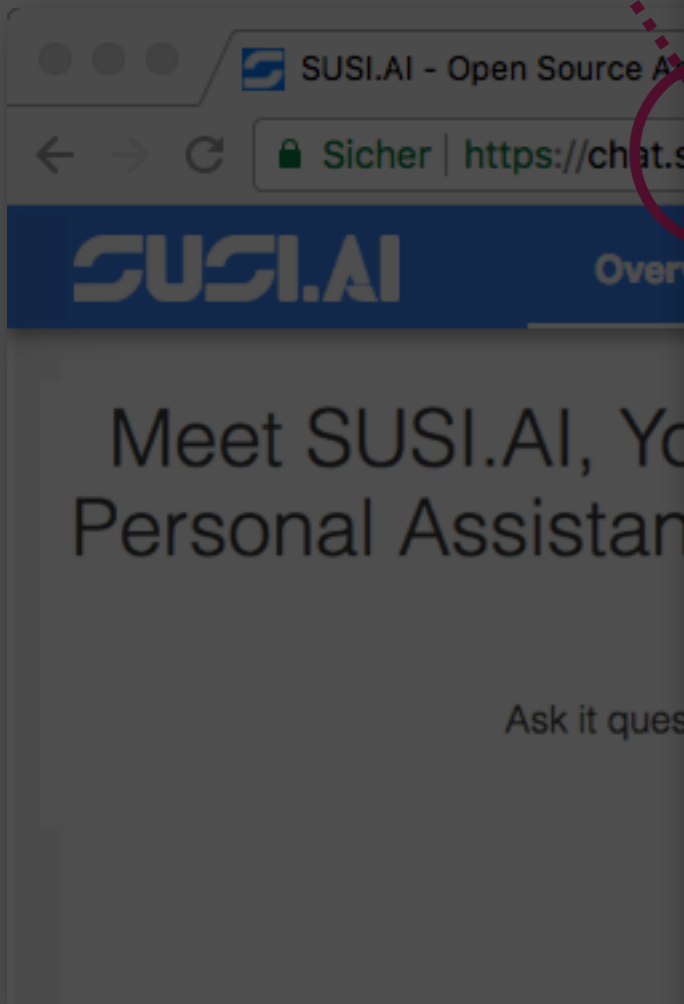
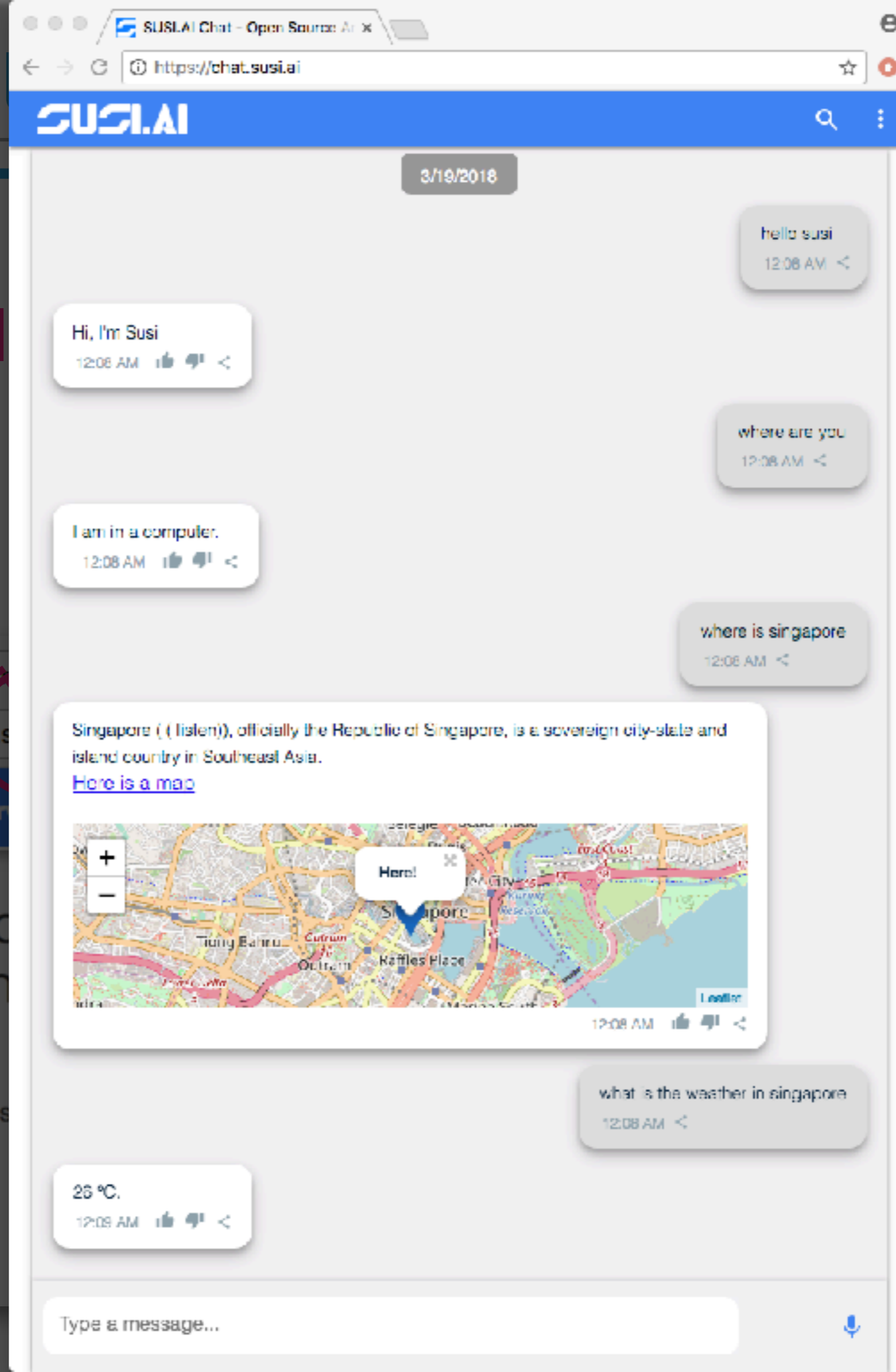
SOFTWARE & HARDWARE



# HOW TO CONTRIBUTE WEB CHAT WITH

## OPEN SUSI.AI

1



## N CHAT



# THE **SUSI** ECOSPHERE FOR DIGITAL ASSISTANTS

WIKI-LIKE CONTENT  
MANAGEMENT SYSTEM

EASY SKILL LANGUAGE

The screenshot shows the SUSI AI interface for editing a skill. At the top, the SUSI AI logo is visible. Below it, there are dropdown menus for 'Category' (set to 'Knowledge') and 'Language' (set to 'English'). A text input field contains the skill name 'remember', and a 'CHOOSE AN IMAGE' button is next to it. Below the input fields is a code editor showing the skill's metadata and a list of natural language utterances. The metadata includes fields for name, author, author URL, description, dynamic content, developer privacy policy, image, and terms of use. The utterances are a list of phrases related to remembering things, such as 'remember that my \* are \*', 'remember my \* is \*', and 'please remember that \* is \*'. At the bottom, there is a 'Commit message' field and 'SAVE' and 'CANCEL' buttons.

SKILLS

CONVERSATIONAL SEARCH  
CONVERSATIONAL ENTERTAINMENT  
CONVERSATIONAL NEWS  
CONVERSATIONAL PRODUCTIVITY  
CONVERSATIONAL TELEPHONY  
CONVERSATIONAL MESSAGING  
CONVERSATIONAL COLLABORATIVE WORK  
CONVERSATIONAL SHOPPING  
CONVERSATIONAL BANKING  
CONVERSATIONAL TRAVEL BOOKING  
HOME APPLIANCES CONTROL  
HOME ENTERTAINMENT CONTROL  
HOME SECURITY CONTROL  
HOME METERING CONTROL

CLICK ON SKILL

4

Category: Knowledge | Language: English | Sort by: Name

**Do you have a name**

**Aboutsusi**  
Information about SUSI.AI

👍22 👎13

**Acronyms**  
Acronym of NASA

**Acronyms**  
Tells us about acronyms. An abbreviation formed from the initial letters of other words and pronounced as a word

👍0 👎0

**Anagram for best**

**Anagrams**  
A skill that returns the anagrams for a word

👍0 👎1

**search for atomic mass of radium**

**Atomic**  
A skill to tell atomic mass and elements of periodic table

👍0 👎0

**Tell me about the book Harry Potter**

**Books**  
A skill to give user the name of the book and link to read more.

👍0 👎0

**Borders with germany?**

**Borders**  
A skill to tell us about neighbouring countries of a country.

👍0 👎0

**What is the capital of India?**

**Capital**  
A skill to tell user about capital of any country.

👍3 👎0

**Know any car models manufactured by ford**

**Cars**  
A skill to tell user about cars made by a car manufacturer

👍0 👎0

**Tell me something interesting about cats!**

**Cat**  
Hello

👍0 👎0

**who is the ceo of google**

**Ceo**  
A skill to tell answers for the name of the CEO of a company.

👍0 👎0

**Who created you?**

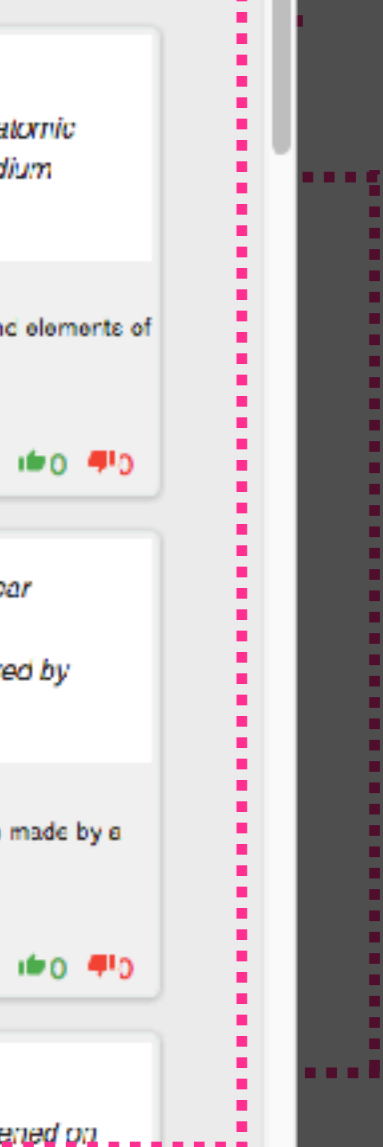
**Creator Info**  
Want to know about fossasia, just ask susi to tell that. Susi tells about the SUSI.AI creators

👍1 👎0

**What happened on 2/14.**

**Day In History**  
A skill to give answers related history.

👍0 👎0



Category

Knowledge

Language

English

Enter Skill name

day\_in\_history



CHOOSE AN IMAGE

```
1 ::name Day in History
2 ::author Saurabh Jain
3 ::author_url https://github.com/saurabhjn76
4 ::description A skill to give answers related history.
5 ::dynamic_content Yes
6 ::developer_privacy_policy
7 ::image images/calender.jpg
8 ::terms_of_use
9
10 What happened on *
11 !example:What happened on 2/14.
12 !expect:February 14th is the day in 1876 that Alexander Graham Bell applies for a patent for the telephone, as does
    Elisha Gray.
13 !console:Year-$year$ - $text$
14 {
15   "url":"http://history.muffinlabs.com/date/$1$",
16   "path":"$.data.Events"
17 }
18 eol
19
```

Commit message


Enter Commit Message

SAVE

CANCEL

Friday, 23rd March

16:40 - 17:05

From rules to AI algorithms **FROM RULES  
TO AI ALGORITHMS**

Artificial Intelligence in intelligent digital personal assistants are not simple chatbots. They are driven by the deduction rules of expert systems and the principle of machine learning.

In this talk we learn how this technology is used in detail using the SUSI personal assistant framework.

Rules - in the context of the conversational web now called 'skills' - are implemented with the combination of a backtracking system combined with cloud access to external knowledge.

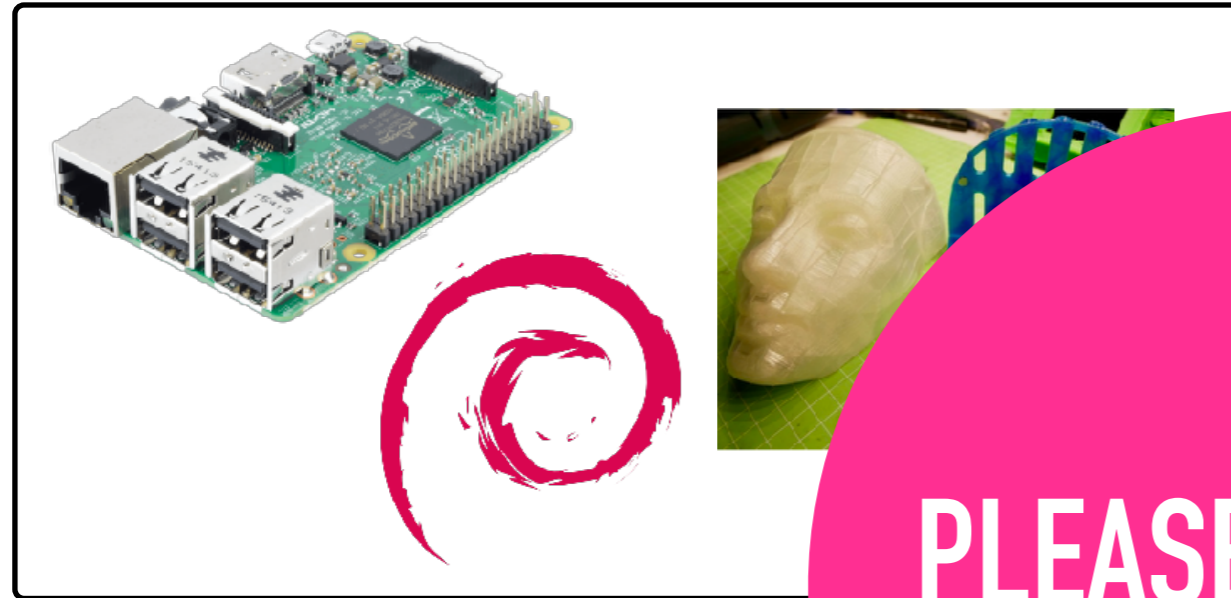
We will learn how a expert system-based personal assistant works and why it can be very easy to write skills for such a system.

**MICHAEL CHRISTEN****@0rb1t3r**

# THE SUSI ECOSPHERE FOR THE CONVERSATIONAL WEB

## A COMPREHENSIVE WORK READY FOR YOUR CONTRIBUTION

### STANDING ON THE SHOULDERS OF GIANTS



### FREE AND OPEN SOFTWARE COLLABORATION

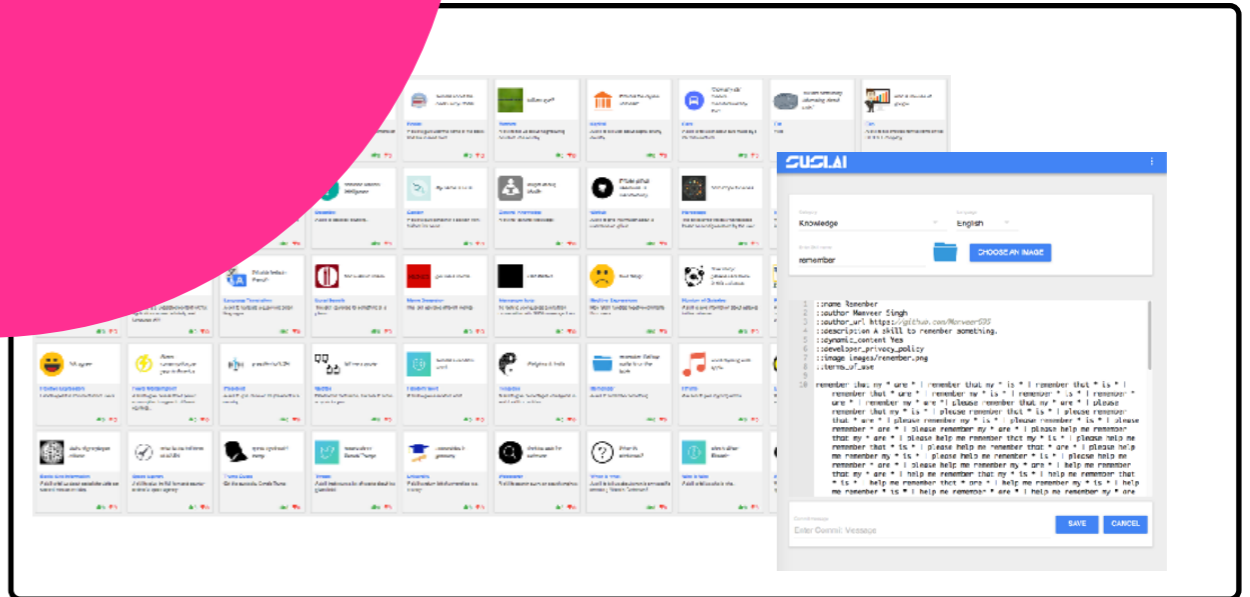


**PLEASE JOIN IN!**

### SELF- OR CLOUD HOSTING OF DATA SERVICES



### COLLABORATION



# AI, CLOUD AND THE CONVERSATIONAL WEB

New web services, based on Artificial Intelligence technology approach quickly as intelligent digital personal assistants beyond the ability of simple chatbots. Search engines will provide us with answers to all questions within the framework of conversational interfaces.

Free and open source implementations of digital assistants are challenged with the complexity of the conversational web ecosphere of smart devices and the ability to create intelligent skills out of cloud services.

The FOSSASIA community has worked hard to create such an ecosystem to establish a personal assistant framework for everyone based on the principle of privacy and collaboration.

**MICHAEL CHRISTEN**

@0rb1t3r