Chatbot

Lili Cheng podcast

Raspberry Pi monitors and sends data.

Siri sucks

Google Home can be broadcasted with other Google Home devices in 1 network

Can play white noise

Tensor flow

Sam chatbox from Amnis Consulting

Chatbots are intuitive, automated, fun interactions

Business tools for several B2C, B2B and line of business automation.

Amnis Conulsting

Design, built and manage chatbot for small businesses and enterprise company.

Bots & Conversational AI by Lili Cheng, Microsoft AI + Research (@lilich)

Bot and cognitive services

Why now?

Mirc (chatroom) bots existed for a long time

Learns the input, forms dictionary.

Command line.

Only understand “commands”.

“back”

Desktops before doesn’t have back button

“home”

“what?”

“huh?”

Speak to someone with “back”, people won’t understand in what context?

Uses Azure Search -> chat bot for Expedia data.

Search Features

Synonyms

Custom ranking

Words roots /lemmatization

Refinement through facets

Import from multiple databases

Refine by…

Subset..

“People aren’t binary, AI is more like vectors, motion & conversation…”

AI open source

Software developers not the best for AI user experience or dialogue

Wechat

Every app services are integrated in Wechat

Xiaoice (chat bot)

Goal was to make people want a conversation with chat bot.

Google and Alexa doesn’t have the purpose of chatting you up.

XiaoIce ( “Little Bing”)

Began as a “hackathon” project to create a “fun & engaging” chatbot.

Embeds in existing Chinese social networks

Released on May 29, 2014

Viral within 72 hours

WeChat stuf fit off

XiaoIce skills

Emotional skills

Chit-chat

Has general-purpose dialogue

Translation service

Solve mathematics

Count Sheep does counts for sleep lol

Realized that people just want to have fun

Dog recognition

Dog recognition + Chit-Chat

Rather than saying “bull terrier”

Dog recognizer -> bull terrier -> chat engine.

Passing Turing Test in Group Social Chatting

People asking who is XiaoIce?

Will people invite a bot with a group chat??

XiaoIce

Has TV shows, and sings songs.

“For Sympathetic Ear, More Chinese Turn to Smartphone Program.” – The New York Times.

Why not try it in the US?

TayTweets (chat bot)

Groupme and quik.

Biggest users were the not fun group, gamers, trump supports, anti-feminists, tech geeks

Lessons

AI Tech

1:1 small groups public

Culture

Memes & science fiction

Women vs Men

Data

In China, people don’t usually act that why in the Internet. Has restricted word list.

America, people vs AI. Very individualistic view

All the assistants (chat bots) are women.

Picked a gender-neutral named bot.

To not reinforce stereotypes

Feb 2018

There’s Indian version

Zoe in US

Companies are worried with the digital transformation and AI.

No conversation design for search engines and the likes. i.e., like designing your physical store

Conversational AI (Bot Framework)

Embed in Skype

Explosive growth

1M+ requests/day

3M+ messages/day

250k+ developers

30k+ active bots/month

2.5k+ new bots created/week

1k+ companies

Examples

App for UK National Rail.

Can have dialogue and schedule

Feed-based UI.

Dixons Carphone (like bestbuy)

Uses AI bot to boost customer engagement

Connects to offline inventory

Sales people can see

Bot framework is used to communicate

Different conversational rules for customers and employees

Chat bot can be simple like trigger play song.

And complex

Customer case studies

VHV – insurance bot

UPS

Navitime

Do not pay your parking ticket bot

Resist bot, helps you against the senator

Bot Framework & Microsoft Teams

Microsoft AI Platform: Azure + AI

AI Tools for coding

VS Tools for Machine Learning, Azure ML Studio, Azure ML Workbench

Azure Services deals well with private data

Open source on Git Hub, Integrate Anywhere

In node and Csharp

Partnered with ben brown

Need business models for chat bots

Microsoft Graphs

World knowledge

Work knowledge

User knowledge

Cortana, office 365, LinkedIn, Xbox

Microsoft cognitive services

Vision

Speech

Language

Knowledge

Search

Labs

Adaptive Cards (open-source tool)

Open framework multiple canvases for Windows, Productivity-Microsoft Teams, Skype, Andriod, iOs

Bot Health, Telemetry, & Monitoring

Azure Application Insights

GDPR, Compliance, Worldwide Footprint

GDPR – EU rule, must adhere to strict policy on handling user data.

Barrier in multinational companies. i.e., read Spanish-Spanish, Brazil-Spanish

… understanding

… emotion

… questions

We don’t respond in software in basic human things