Voice User Interface for Mobile APPS

Dashen Fan

CEO, VUI.AI

Why do you need a VUI for App?

While driving

Annually, in US only:
1.6 million car accidents each year.
390,000 injuries due to texting while driving.
6,000 deaths texting while driving.
1/4 of all car crashes involved use of cell phone.

Source: https://carsurance.net/blog/texting-and-driving-statistics/

Walking down the street in downtown

Annually in US:
11,100 injuries due to use of cell phone when walking.
5376 death pedestrians
60 percent of people texting while walking

Source: https://www.rd.com/culture/texting-and-walking-injuries/

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Existing Voice Solution

You can **make a phone call** to a business where

➔ A real person will answer and help you out

➔ An IVR system will handle you call

Why can't I talk directly to my App to get things done?

Ask IA, one of Alexa, Google Assistant or Siri,

Hope there is a skill or action for your task

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Why can't I have an IA for my App?

Two Challenges before you start:

Must work in any noisy environment

➔ In a moving car 75 mph

➔ In busy street or a noisy restaurant

Add a voice UI to an existing touch UI

➔ Integrating into App pages

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Demanding Noise Cancellation

Mic in mobile phone not good enough

➜ Mostly requiring far-talk: ~ 1 – 10 ft

➜ Eliminate any kind of noise, without causing distortion to voice

➜ In-car array microphone accessory:

◆ USB dual-mic cable, Phone holder, Dash Cam, Rearview mirror, etc.

➜ Wearable embedded microphone (array)

◆ Watch, Bluetooth earphone, glass frame, etc.

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Building a Voice UI for App

Built for productivity
– goal oriented

Task Completion instead of
info search or social chat

Multi-model user interface.
Voice UI offers direct link to
App pages, coexist with
App's touch UI and screens

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Voice UI Benefits

For enterprise

Single unified digital interface for your customer. Don't have to reinvent the wheel on lesser capable "applet" skills

Increase user time spend on your App

For users

Leverage App's familiar visual UI always remind users of what to say

Expand App usage to many more scenario

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Case-in-point: Fast Food Ordering

Turn every smartphone into a virtual drive-through terminal

Order your food right there on app while driving to work

Make payment when the order is placed

Collect your food bag in store without waiting.

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Demo

Demo shows how VUI works the magic: https://www.youtube.com/watch?v=J_HBSNkd2-A

Special Features:

➔   No wakeup word

➔   No need to turn off radio

➔   Continuous conversation flow until task completed

➔   Full App functionality with voice UI

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Conclusion

The biggest roadblock to the widespread use of IA is on the front and back

➔ Noise robust voice input

➔ Connection to App to complete a task

VUI.AI has the technology and know how to solve both problems

➔ The best noise cancellation for ASR

➔ APIs for integrating Voice UI into an App

App specific IA inside an App is a viable alternative to general purpose IA

We make sure every of your App user remains as your customer, not Apple, Google or Amazon's customer!

Thanks!

Question and Answer

Email: dashen.fan@vui.ai

Phone： 425-586-0912

Website: www.vui.ai

Youtube / Twitter: vui.ai