

# Exploring Amazon's Echo and the Alexa Voice Service

Vivek Bhookya

# Introductions

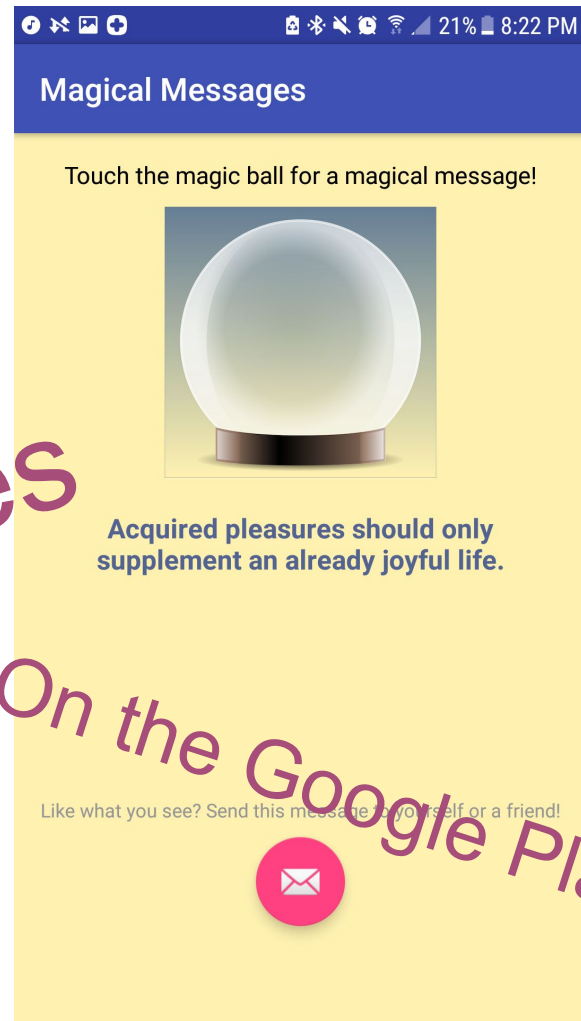
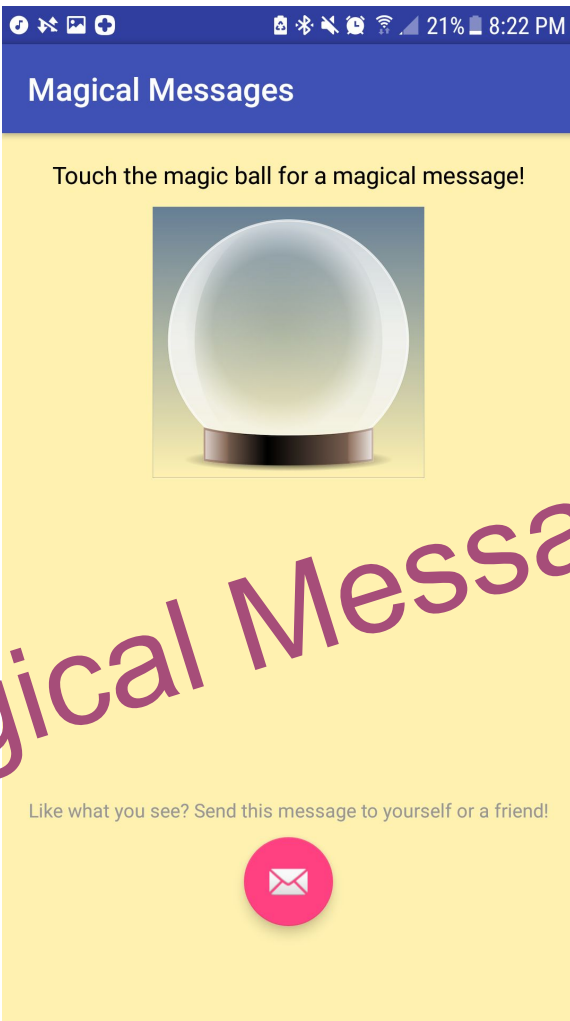


Vivek Bhookya  
Computer science and astronomy  
Sophomore  
Alexa, web, mobile

# The VUI - The Voice User Interface



Let's text Vivek a Magical Message



Magical Messages

On the Google Play Store

Let's see how many steps it takes:

AT&T

22%

8:21

Fri, March 30

Phone ▾

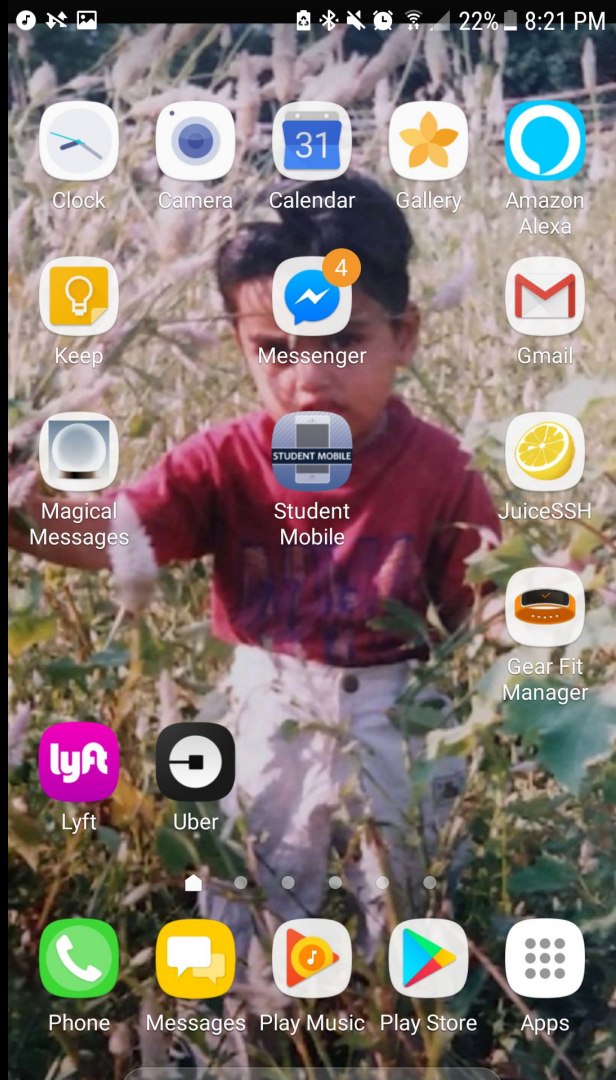
Mobile data turned off

While Mobile data is turned off, you will not be able t..

Swipe screen to unlock

samsung pay





Clock



Camera



Calendar



Gallery



Amazon  
Alexa



Keep



Messenger



Gmail



Magical  
Messages



Student  
Mobile



JuiceSSH



Gear Fit  
Manager



Lyft



Uber



Phone



Messages



Play Music



Play Store



Apps

## Magical Messages

Touch the magic ball for a magical message!



Like what you see? Send this message to yourself or a friend!





## Magical Messages

Touch the magic ball for a magical message!



**Acquired pleasures should only supplement an already joyful life.**

Like what you see? Send this message to yourself or a friend!



< NEW MESSAGE



Vivek



You are a champion.

A magical message for you!  
I have a magical message for  
you!

Acquired pleasures should  
only supplement an already  
joyful life.



From "Magical Messages", an  
android app.



SEND

I

I love you

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English (US)

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Vivek

+13096602340



android app.

8:23 PM

A magical message for you!  
I have a magical message for  
you!

Acquired pleasures should only  
supplement an already joyful  
life.

From "Magical Messages", an  
android app.

8:23 PM



Enter message



SEND

I

I love you

Thsnk



1 2 3 4 5 6 7 8 9 0

Q W E R T Y U I O P

A S D F G H J K L

↑ Z X C V B N M ↵

!#☺ ☺, English (US) . ↵

Take away the screen, add an Echo, and  
with voice I can shorten that entire  
process simply to:

Amazon Echo + Alexa + AWS



# Amazon Echo







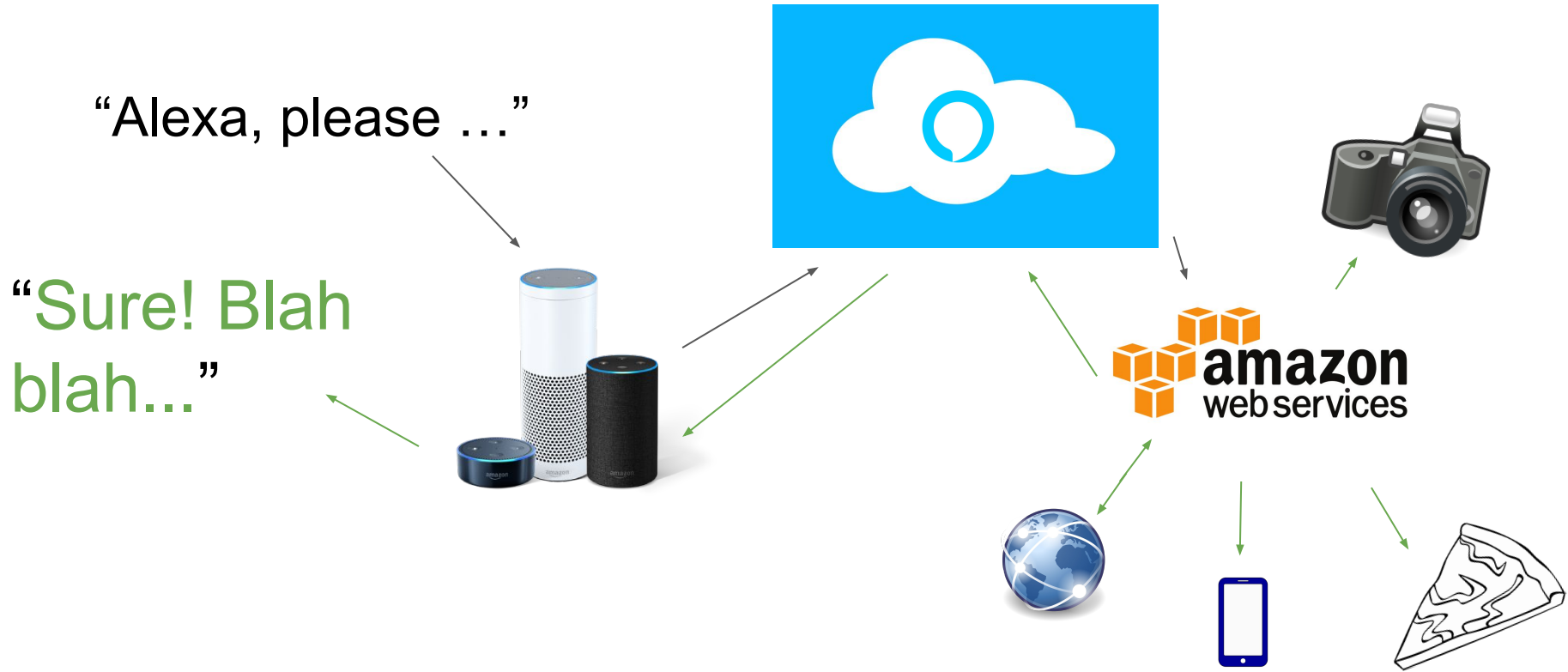
**amazon**  
web services

**AWS**

Amazon Echo + Alexa + AWS



Amazon Echo + Alexa + AWS

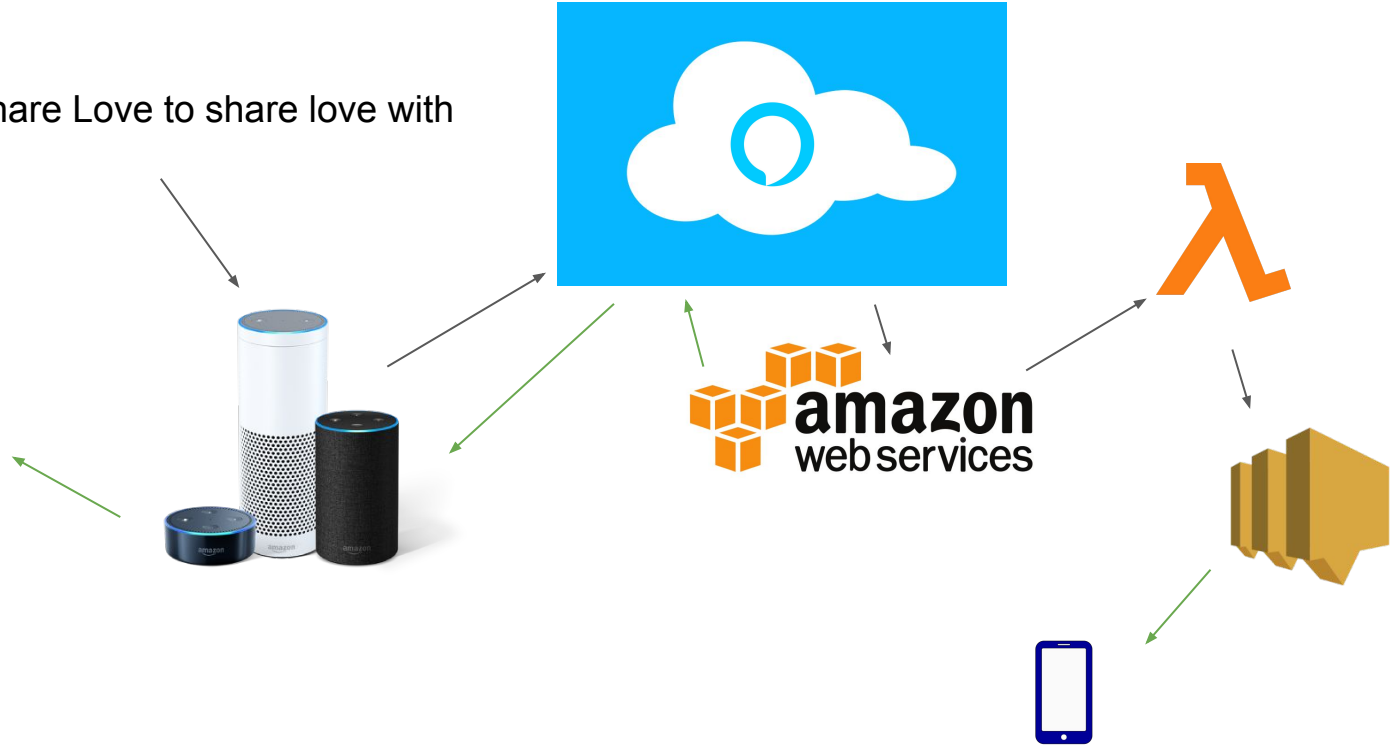


Amazon Echo + Alexa + AWS + ...

What are we going to do today?

“Alexa, please ask Share Love to share love with [name].”

“Sure.”



Amazon Echo + Alexa + AWS Lambda + AWS SNS



Welcome to the University of Illinois.

Let's get started.

[github.com/mrvivacious](https://github.com/mrvivacious)

AWS\_Lambda\_and\_SNS

# Image sources

VUI (slide 4): <http://www.woshipm.com/pd/765280.html/comment-page-1>

Magical Messages stills: [Vivek Bhookya](#)

Echo, Echo Dot, Echo Plus devices (slides 17, 21, 22, 24): <http://www.thedget.com/39>

Alexa Voice Service icon (slides 18, 21, 22, 24):  
<https://www.inman.com/2017/06/26/will-alexa-find-your-offices-next-top-producer/>

Camera (slide 22): <http://athelred.com/photography-camera-png/>

# Image sources 2

AWS logo (slides 19, 21, 22, 24):

<https://hackernoon.com/aws-vs-heroku-cloud-platform-comparison-for-2017-5f2194c0673e>

Blue cloud (slides 21, 22, 24): [https://en.wikipedia.org/wiki/File:Cloud.\\_blue\\_background.svg](https://en.wikipedia.org/wiki/File:Cloud._blue_background.svg)

Earth (slide 22):

[https://www.google.com/search?safe=active&q=world+wide+web+svg&tbm=isch&source=iu&ictx=1&tbs=simg:CAESrAIJEdKK4AnIOhUaoAILEKjU2AQaBggVCAEICQwLELCMpwwaYApeCAMSJq8MIhewDMkB9xY5lxc9wAGPArc3-TOcKelouij\\_1M\\_10z-DOHJ5o9GjBFUQM43diYgZwKpsEzFdNEZmySd8NWVS\\_1k4WJNf6ROfj3mKDe03SDq7rRzi\\_136yzlgBAwLEI6u\\_1ggaCgoICAESBNRFijEMCxCd7cEJGosBChcKBWVhcnRo2qWI9gMKCggvbS8wMmo3MQoYCgVnbG9iZdqliPYDCwoJL20vMDFxX2N5ChgKBnNwaGVyZdqliPYDCgoIL20vMDZ5NDcKHwoMaWxsdXN0cmF0aW9u2qWI9gMLCgkvbS8wMWtyOGYKGw0lZ3JhcGhpY3PapYj2AwsKCS9tLzAyMXNkZww&fir=qBP-oQILzi6RdM%253A%252CYEptCJH-MH2twM%252C\\_&usg=\\_\\_n36uOeNpgjNQogdXKcWCPQ7MPn4%3D&sa=X&ved=0ahUKEwjpiMvI0KjaAhUI5YMKHfMgAaEQ9QEIPjAC#imgsrc=qBP-oQILzi6RdM](https://www.google.com/search?safe=active&q=world+wide+web+svg&tbm=isch&source=iu&ictx=1&tbs=simg:CAESrAIJEdKK4AnIOhUaoAILEKjU2AQaBggVCAEICQwLELCMpwwaYApeCAMSJq8MIhewDMkB9xY5lxc9wAGPArc3-TOcKelouij_1M_10z-DOHJ5o9GjBFUQM43diYgZwKpsEzFdNEZmySd8NWVS_1k4WJNf6ROfj3mKDe03SDq7rRzi_136yzlgBAwLEI6u_1ggaCgoICAESBNRFijEMCxCd7cEJGosBChcKBWVhcnRo2qWI9gMKCggvbS8wMmo3MQoYCgVnbG9iZdqliPYDCwoJL20vMDFxX2N5ChgKBnNwaGVyZdqliPYDCgoIL20vMDZ5NDcKHwoMaWxsdXN0cmF0aW9u2qWI9gMLCgkvbS8wMWtyOGYKGw0lZ3JhcGhpY3PapYj2AwsKCS9tLzAyMXNkZww&fir=qBP-oQILzi6RdM%253A%252CYEptCJH-MH2twM%252C_&usg=__n36uOeNpgjNQogdXKcWCPQ7MPn4%3D&sa=X&ved=0ahUKEwjpiMvI0KjaAhUI5YMKHfMgAaEQ9QEIPjAC#imgsrc=qBP-oQILzi6RdM):

# Image sources 3

Phone (slides 22, 24): <http://rosedale.chicousd.org/pictures/Remind.jpg>

Pizza (slide 22): <https://www.pobarvanke.net/pobarvanke-hrana/pobarvanka-pica.html>

AWS Lambda (slide 24): <https://pixabay.com/en/lambda-orange-greek-mathematics-39473/>

AWS SNS (slide 24): <https://www.outsystems.com/forge/component/2882/amazon-sns/>