

# Implementation of Social Media for Dissemination of Research Activities at the Center of Excellence in Remote Sensing Education and Research at Elizabeth City State University

2016 ECSU Academic Year REU



# Team Members

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- Charles Hockaday Jr.
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- Joel Gonzales-Santiago
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# Abstract

The Center of Excellence in Remote Sensing Education and Research (CERSER) at Elizabeth City State University (ECSU) was established in the spring of 2003 to develop innovative and relevant research collaborations focused on remote sensing applications to coastal, ocean, marine, and polar research. The program has supported various other projects through grants and collaborations with the National Science Foundation, Office of Naval Research, the National Aerospace and Space Administration, and other various government and educational entities.



# Abstract

CERSER has utilized the web site located at <http://cerser.ecsu.edu> to provide documentation of research activities to funding agencies, faculty, students, and event attendees from its inception. This site provides information regarding past, current, and future events as well as research conducted by students in the program and with affiliated universities or government agencies. The sister site located at <http://nia.ecsu.edu> is the original location used for documentation of information from previous and current research projects under this program and remains active today.

In order to reach out to a broader audience, the implementation of social media was explored during this project. The goal of this research was to establish a social media presence on Facebook, Twitter, Instagram, and Google+.



# Abstract

This project explored the implementation of each social media application and identified appropriate audiences and methods of disseminating information. The methods included what information to post, when to post it, and how often to share. Best practices were taken from both educational and commercial sources.



# Introduction

- Social Media
- Web 2.0



# Publications

- Research Purpose
- Facebook
- Twitter
- Instagram
- Google+



# Facebook

- Harvard University
- 1.59 Billion Users
- Face Books
- Platforms
- Privacy





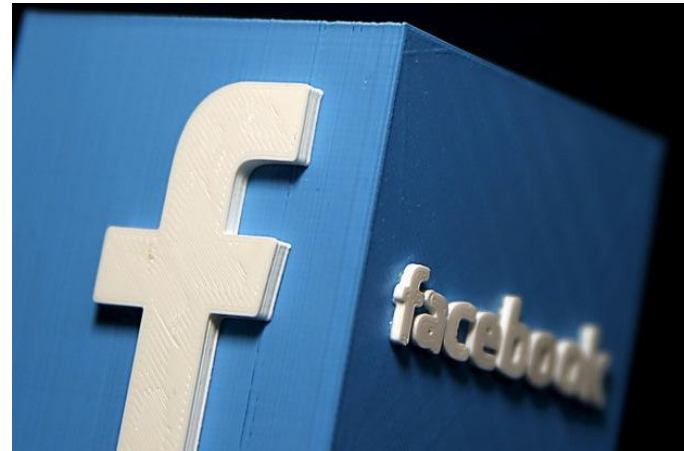
# Facebook Usage

- Profile
- Status Post
- Media
- Limits



# Facebook Features

- 37 Languages
- Markets
- Groups
- Events
- Pages
- Presence Technology



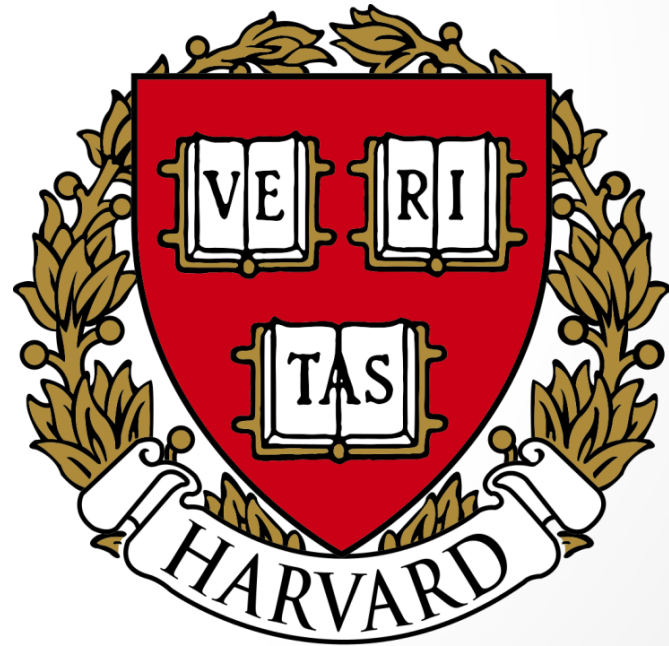
# Facebook Development

- Mark Zuckerberg
- Facemash
- Hot or Not
- Legal Difficulties



# Facebook Development

- thefacebook.com
- Harvard -> Ivy League -> Most US Universities
- Available to all



# Facebook Sign-up

- Signing up
- Account settings
- Pages



The image shows the Facebook sign-up page. At the top, there's a blue header with the Facebook logo and login fields for 'Email or Phone' and 'Password', with a 'Log In' button. Below the header, on the left, is an illustration of a hand giving a thumbs up with a heart above it, and a group of people below. Text below the illustration says 'Thanks for stopping by! We hope to see you again soon.' On the right, the 'Sign Up' section is titled 'Sign Up' with the text 'It's free and always will be.' Below this are input fields for 'First name', 'Last name', 'Mobile number or email', 'Re-enter mobile number or email', and 'New password'. There's a 'Birthday' section with dropdowns for 'Month', 'Day', and 'Year', and radio buttons for 'Female' and 'Male'. A green 'Sign Up' button is at the bottom of the form. Below the form, there's a link 'Create a Page for a celebrity, band or business.' At the very bottom, there's a row of language links and a footer with 'Facebook © 2016'.

facebook

Email or Phone Password Log In

Keep me logged in Forgot your password?

## Sign Up

It's free and always will be.

First name Last name

Mobile number or email

Re-enter mobile number or email

New password

**Birthday**

Month Day Year Why do I need to provide my birthday?

☐ Female ☐ Male

By clicking Sign Up, you agree to our Terms and that you have read our Data Policy, including our Cookie Use.

**Sign Up**

Create a Page for a celebrity, band or business.

English (US) Español Français (France) 中文(简体) العربية Português (Brasil) Italiano 한국어 Deutsch हिन्दी ...

Sign Up Log In Messenger Facebook Lite Mobile Find Friends Badges People Pages Places Games  
Locations Celebrities Groups About Create Ad Create Page Developers Careers Privacy Cookies Ad Choices

Facebook © 2016



# Facebook Pages

- Purpose
- Create Page
- Category
- Profile Picture
- Age range/Interests



The image shows the Facebook Sign Up page. At the top, there's a blue header with the Facebook logo and login fields for Email or Phone, Password, and a Log In button. Below the header, there's a large illustration of a hand giving a thumbs up with a red heart above it, and a group of people below. To the right of the illustration is the Sign Up form. The form includes fields for First name, Last name, Mobile number or email, Re-enter mobile number or email, and New password. Below these is the Birthday section with dropdowns for Month, Day, and Year, and radio buttons for Female and Male. A green Sign Up button is at the bottom of the form. At the very bottom of the page, there's a footer with various links like Sign Up, Log In, Messenger, Facebook Lite, Mobile, Find Friends, Badges, People, Pages, Places, Games, and a copyright notice for 2016.

facebook

Email or Phone Password Log In

Keep me logged in Forgot your password?

## Sign Up

It's free and always will be.

First name Last name

Mobile number or email

Re-enter mobile number or email

New password

Birthday

Month Day Year Why do I need to provide my birthday?

Female Male

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Sign Up

Create a Page for a celebrity, band or business.

English (US) Español Français (France) 中文(简体) العربية Português (Brasil) Italiano 한국어 Deutsch हिन्दी

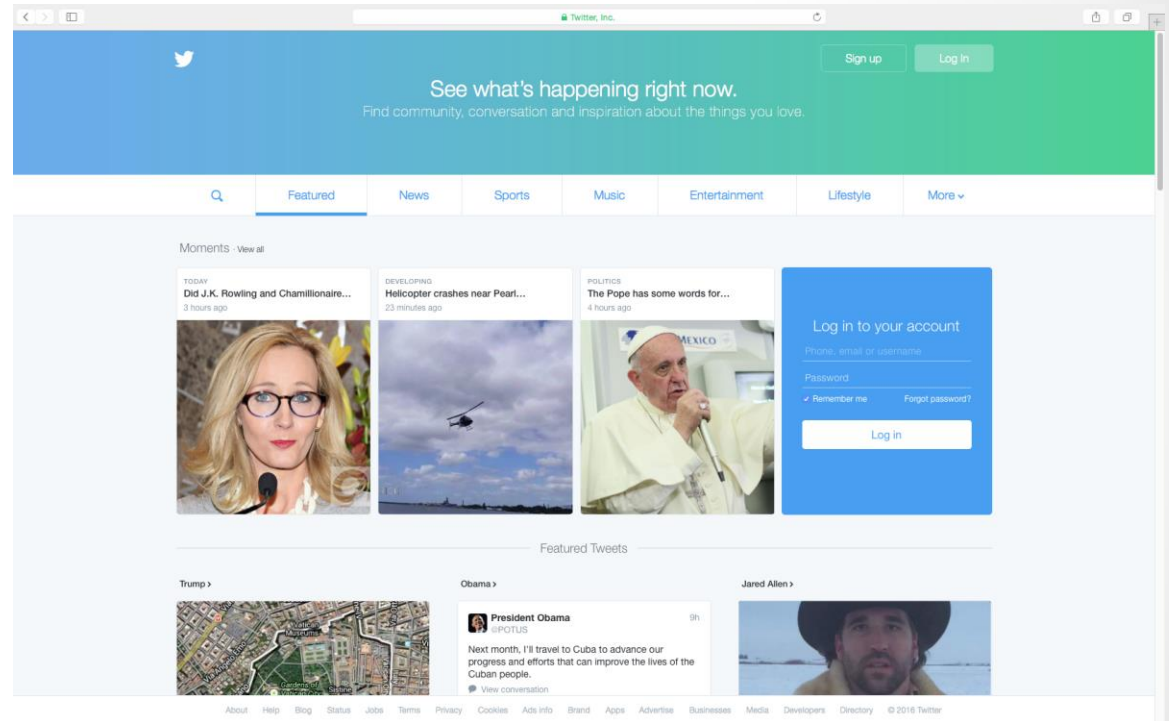
Sign Up Log In Messenger Facebook Lite Mobile Find Friends Badges People Pages Places Games  
Locations Celebrities Groups About Create Ad Create Page Developers Careers Privacy Cookies Ad Choices

Facebook © 2016



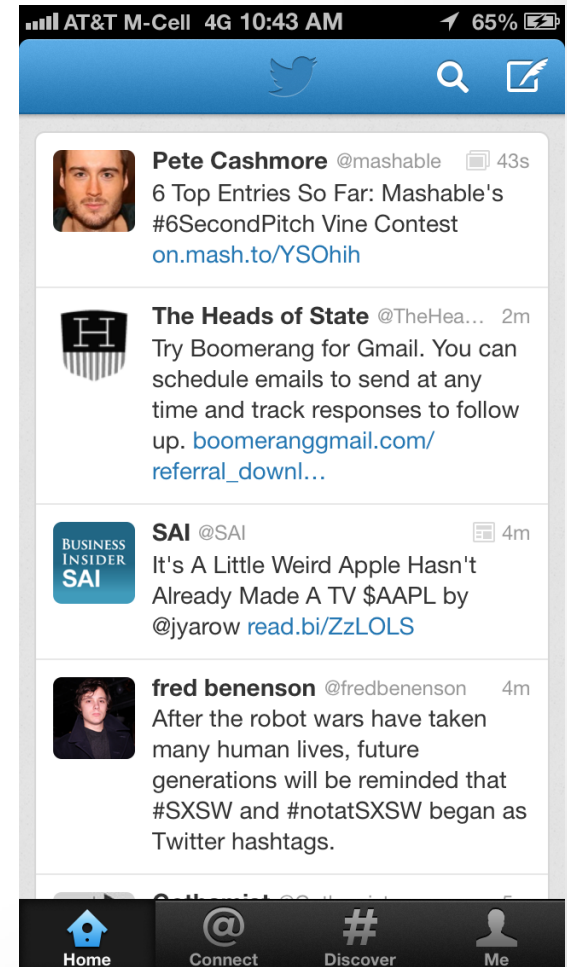
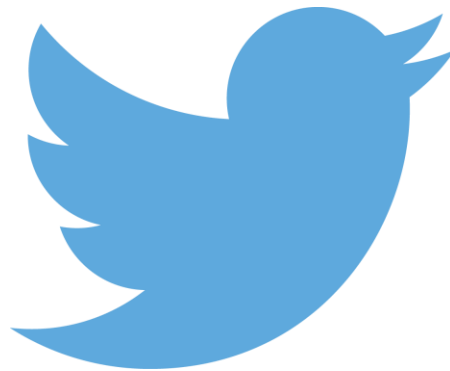
# Twitter

- Purpose
- Users
- Access
- Twitter Inc.
- Platform



# Twitter Beginnings

- 2006
- Usage
- Following
- Tweets





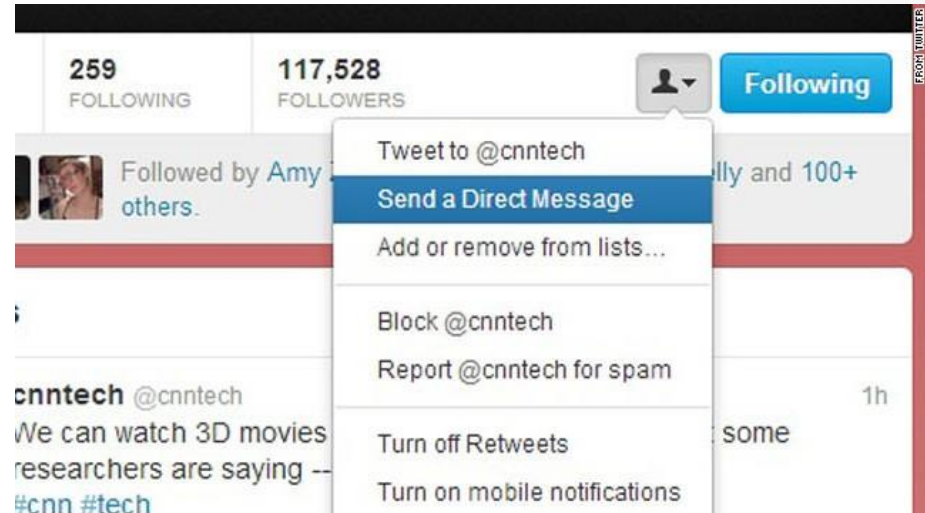
# Twitter Development

- Odeo
- 2007 South by Southwest Festival



# Twitter Features

- Direct Messaging
- Retweeting
- Privacy



# Instagram

- Overview
- Mobile App
- Version 2.0



# Instagram Development

- Founders
- Odeo
- Burbn
- Instant Camera + Telegram
- Acquisition by Facebook



# Google+

- Overview
- Development
- Orkut, Wave, Buzz



orkut



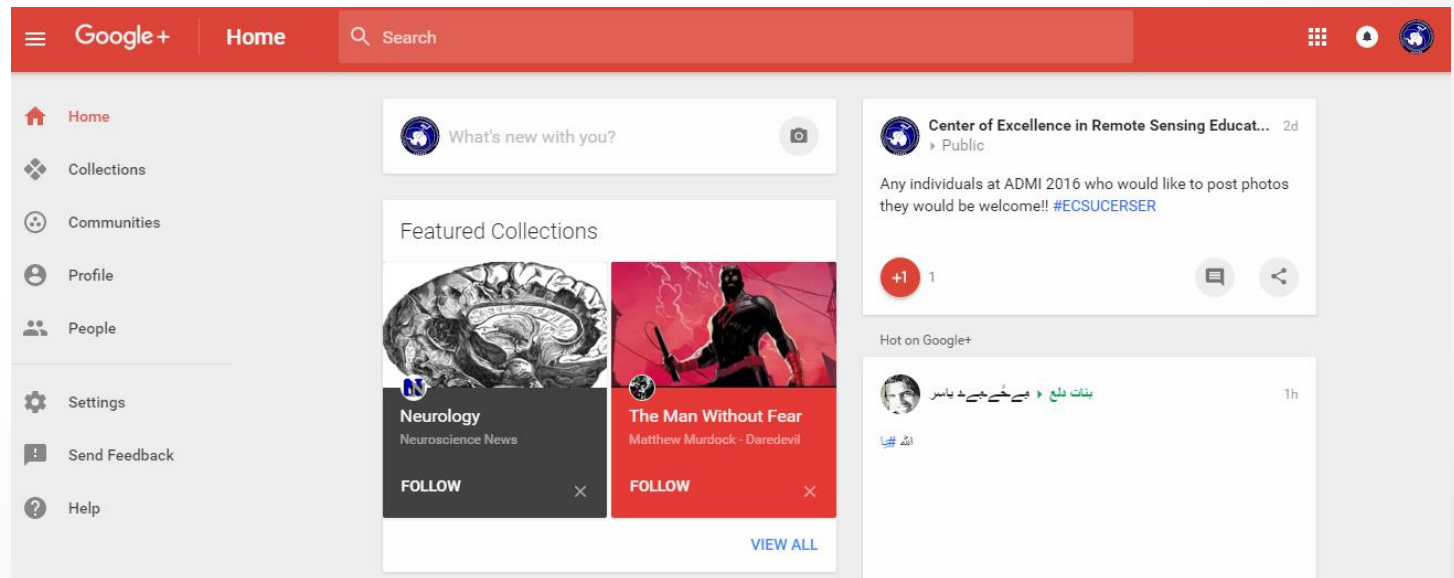
# Google+ Features

- Circles
- Hangouts
- Events
- Polls



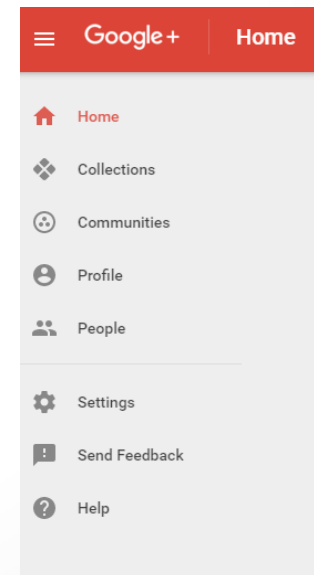
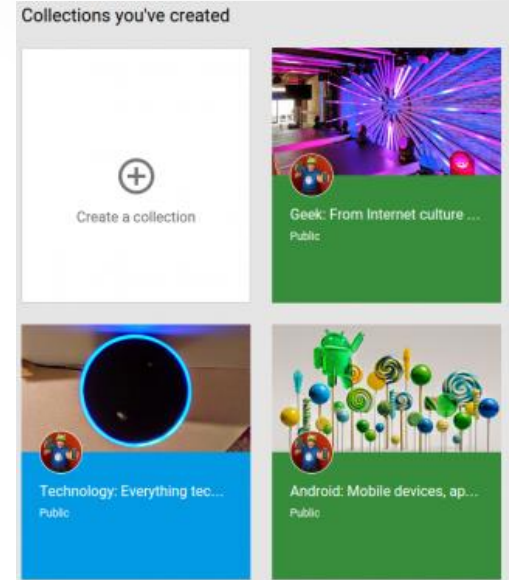
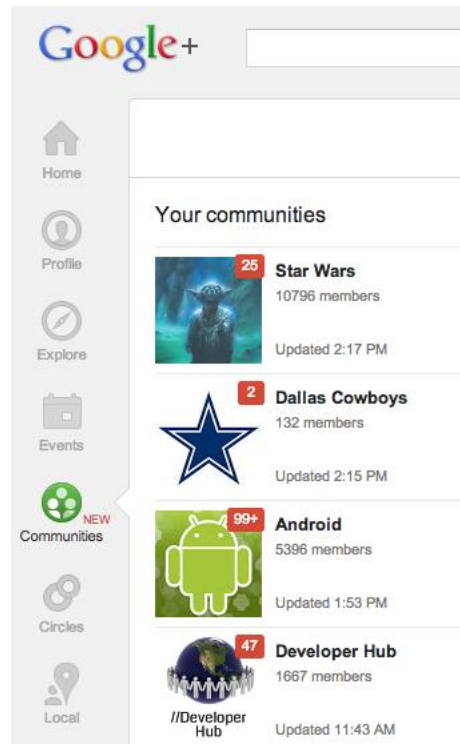
# Google+ Posts

- Posting
- Privacy
- Images



# Google+

- Collections
- Communities
- Ads
- Classic





# Hashtags

- Overview
- Etymology
- Internet Relay Chat (IRC)
- Comments



# Facebook: Sign-up

- Facebook.com
- Screen Prompts
- Submit
- Profile picture



The image shows the Facebook sign-up page. At the top, there's a blue header with the Facebook logo and login options. Below the header, on the left, is an illustration of a hand holding a smartphone with a heart above it, and a group of people celebrating. On the right, the 'Sign Up' section is visible, including fields for first and last name, mobile number or email, re-enter mobile number or email, and a new password. There are also dropdowns for birthday (Month, Day, Year) and radio buttons for gender (Female, Male). A green 'Sign Up' button is at the bottom of the form. Below the form, there's a footer with various links and the Facebook copyright notice.

facebook

Email or Phone  Password  [Log In](#)

☒ Keep me logged in [Forgot your password?](#)

## Sign Up

It's free and always will be.

First name  Last name

Mobile number or email

Re-enter mobile number or email

New password

**Birthday**

Month  Day  Year  Why do I need to provide my birthday?

☐ Female ☐ Male

By clicking Sign Up, you agree to our [Terms](#) and that you have read our [Data Policy](#), including our [Cookie Use](#).

**Sign Up**

Create a [Page](#) for a celebrity, band or business.

English (US) Español Français (France) 中文(简体) العربية Português (Brasil) Italiano 한국어 Deutsch हिन्दी ...

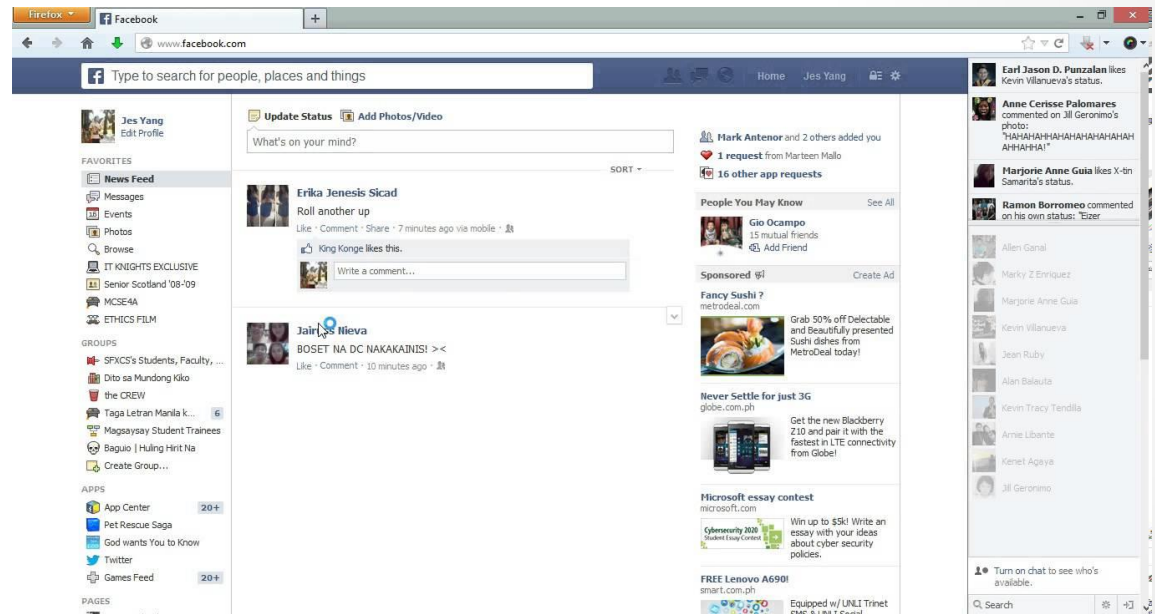
[Sign Up](#) [Log In](#) [Messenger](#) [Facebook Lite](#) [Mobile](#) [Find Friends](#) [Badges](#) [People](#) [Pages](#) [Places](#) [Games](#)  
[Locations](#) [Celebrities](#) [Groups](#) [About](#) [Create Ad](#) [Create Page](#) [Developers](#) [Careers](#) [Privacy](#) [Cookies](#) [Ad Choices](#) [Help](#)

Facebook © 2016



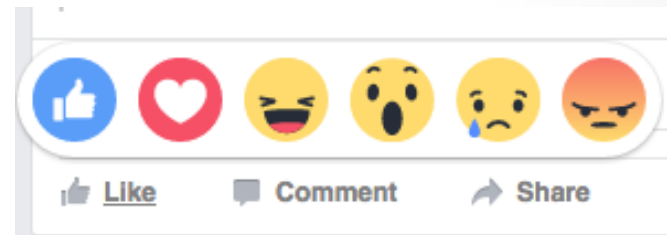
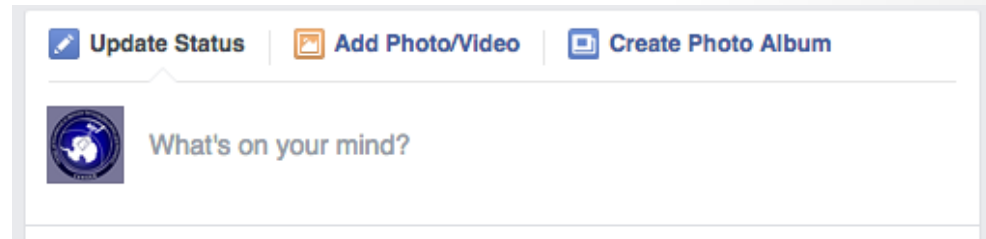
# Facebook: Interface

- News Feed
- Menu Sections
- Messenger
- Presence



# Facebook: Posting

- Status
- Like, Comment, Share
- React
- Comment
- Share



# Facebook: Pages

- Log in
- Create Page
- Category
- Company Name

The screenshot shows the Facebook 'Create a Page' interface. At the top is a dark blue navigation bar with the Facebook logo, a 'Sign Up' button, and login fields for 'Email or Phone' and 'Password' with a 'Log In' button. Below the navigation bar, there's a section titled 'Create a Page' with the subtitle 'Create a Facebook Page to build a closer relationship with your audience and customers.' This section contains six category tiles arranged in a 2x3 grid. Each tile has an icon and a label: 'Local Business or Place' (store icon), 'Company, Organization or Institution' (building icon), 'Brand or Product' (high-heeled shoe and bottle icon), 'Artist, Band or Public Figure' (silhouette with stars icon), 'Entertainment' (TV screen and disc icon), and 'Cause or Community' (heart and sign icon). At the bottom of the page, there's a language selection bar with options like English (US), Español, Français (France), 中文(简体), العربية, Português (Brasil), Italiano, 한국어, Deutsch, and हिन्दी. Below the language bar is a footer with links for Sign Up, Log In, Messenger, Facebook Lite, Mobile, Find Friends, Badges, People, Pages, Places, Games, Locations, Celebrities, Groups, About, Create Ad, Create Page, Developers, Careers, Privacy, Cookies, and Ad Choices. The footer also includes the text 'Facebook © 2016'.

facebook [Sign Up](#)  Email or Phone  Password [Log In](#)  
☒ Keep me logged in [Having trouble?](#)

**Create a Page**  
Create a Facebook Page to build a closer relationship with your audience and customers.

Local Business or Place

Company, Organization or Institution

Brand or Product

Artist, Band or Public Figure

Entertainment

Cause or Community

English (US) Español Français (France) 中文(简体) العربية Português (Brasil) Italiano 한국어 Deutsch हिन्दी ...

[Sign Up](#) [Log In](#) [Messenger](#) [Facebook Lite](#) [Mobile](#) [Find Friends](#) [Badges](#) [People](#) [Pages](#) [Places](#) [Games](#)  
[Locations](#) [Celebrities](#) [Groups](#) [About](#) [Create Ad](#) [Create Page](#) [Developers](#) [Careers](#) [Privacy](#) [Cookies](#) [Ad Choices](#)

Facebook © 2016



# Facebook: Pages

- Set up Name
- About
- Profile Picture
- Preferred Page Audience
- Location
- Gender
- Interests

**Company, Organization or Institution**

Join your supporters on Facebook.

Choose a category ▼

Company Name

By clicking Get Started, you agree to the Facebook Pages Terms.

**Get Started**

**Set Up CERSER**

1 About 2 Profile Picture 3 Add to Favorites 4 Preferred Page Audience

**Tip:** Add a description and website to improve the ranking of your Page in search.  
Fields marked by asterisks (\*) are required.

Add a few sentences to tell people what your Page is about. This will help it show up in the right search results. You will be able to add more details later from your Page settings.

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\*Tell people what your Page is about..

Website (ex: your website, Instagram, Twitter or other social media links)

Need Help? **Skip** **Save Info**

**Set Up CERSER**

1 About 2 Profile Picture 3 Add to Favorites 4 Preferred Page Audience

Tell us about the people you'd most like to connect with. Anyone can find your Page, but we'll do our best to put it in front of the people who matter to you most.

Locations ⓘ **Everyone in this location ▼**

Include ▼ Add locations

Add Bulk Locations...

Age ⓘ 18 ▼ - 65+ ▼

Gender ⓘ **All** Men Women

Interests ⓘ Search interests | Suggestions | Browse

**Skip** **Save**



# Facebook: Privacy

- Settings
- Viewing posts

The screenshot shows the Facebook interface for a page named 'Center of Excellence in Remote Sensing Education and Research'. The top navigation bar includes the Facebook logo, the page name, a search bar, and links for 'Home', 'Find Friends', and user avatars. Below this is a secondary bar with 'Page', 'Messages', 'Notifications', and 'Publishing Tools'. The 'Settings' tab is selected, and a 'Help' link is visible.

The settings are organized into two columns. The left column contains a list of settings categories, and the right column shows the current settings for each category, with an 'Edit' link for each.

Category	Current Setting	Action
<b>General</b>		
Messaging		
Page Info		
Post Attribution		
Notifications		
Page Roles		
People and Other Pages		
Preferred Page Audience		
Apps		
Instagram Ads		
Featured		
Page Support		
Place Tips		
Activity Log		
<b>Favorites</b>	Page is added to Favorites	Edit
<b>Page Visibility</b>	Page published	Edit
<b>Page Verification</b>	Page is not verified	Edit
<b>Visitor Posts</b>	Anyone can publish to the Page Anyone can add photos and videos to the Page	Edit
<b>Audience Optimization for Posts</b>	The ability to select a preferred audience and restrict the audience for your posts is turned off	Edit
<b>Expiring Posts</b>	Ability to set posts that expire is turned off for my Page	Edit
<b>Messages</b>	People can contact my Page privately.	Edit
<b>Tagging Ability</b>	Only people who help manage my Page can tag photos posted on it.	Edit
<b>Others Tagging this Page</b>	People and other Pages can tag my Page.	Edit
<b>Country Restrictions</b>	Page is visible to everyone.	Edit
<b>Age Restrictions</b>	Page is shown to everyone.	Edit
<b>Page Moderation</b>	No words are being blocked from the Page.	Edit
<b>Profanity Filter</b>	Set to strong	Edit
<b>Similar Page Suggestions</b>	Choose whether your Page is recommended to others	Edit
<b>Post in Multiple Languages</b>	Ability to write posts in multiple languages is turned off	Edit
<b>Comment Ranking</b>	Most recent comments are shown for my Page by default.	Edit
<b>Download Page</b>	Download Page	Edit
<b>Merge Pages</b>	Merge duplicate Pages	Edit
<b>Remove Page</b>	Delete your Page	Edit



# Twitter: Sign Up

- Email
- Sign Up
- Name, Phone or Email, and a Password
- Username
- Confirmation

Join Twitter today.

☒ Tailor Twitter based on my recent website visits. [Learn more.](#)

Sign up

By signing up, you agree to the [Terms of Service](#) and [Privacy Policy](#), including [Cookie Use](#). Others will be able to find you by email or phone number when provided.

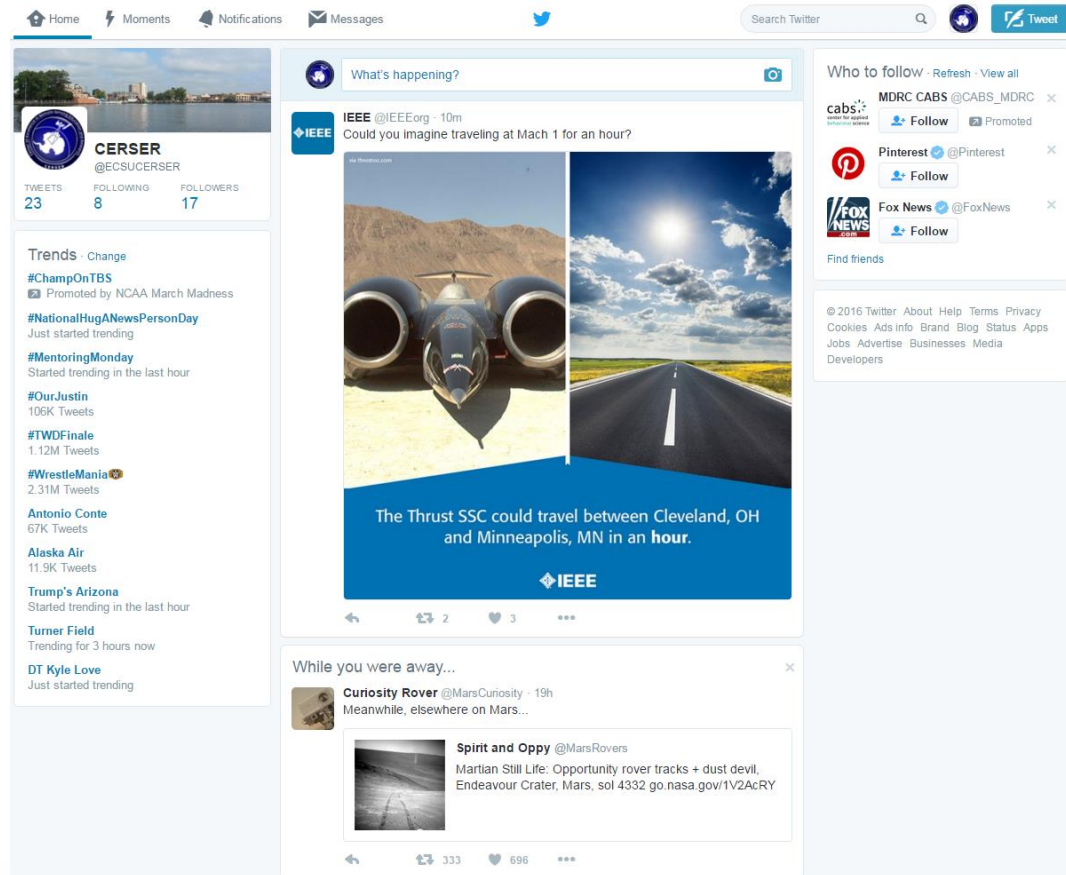
[Advanced options](#)





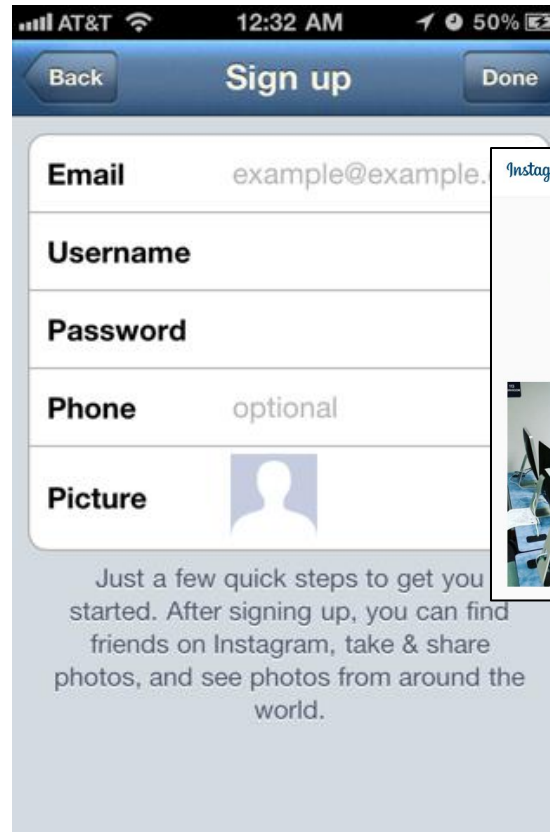
# Twitter: Set Up

- Tweets
- Privacy
- Mute
- Block

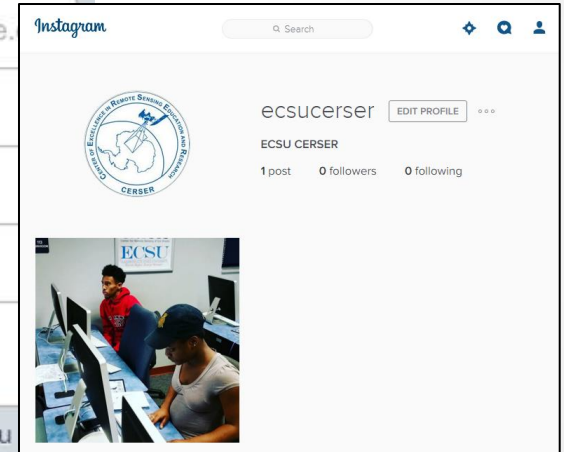


# Instagram

- Mobile
- Download
- Email
- Username/Password
- Privacy Setting
- Logo
- Posting

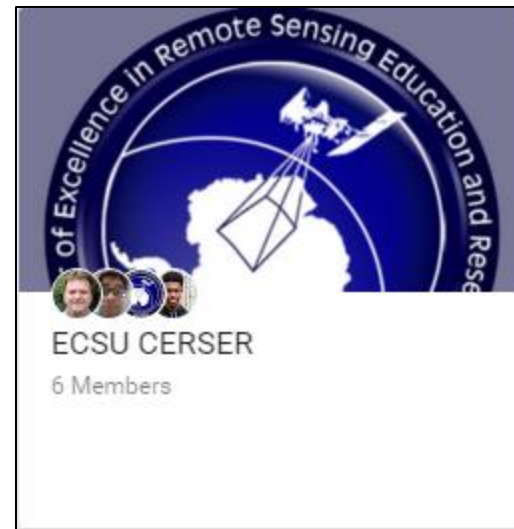


A screenshot of the Instagram mobile app's sign-up screen. The status bar at the top shows AT&T, signal strength, 12:32 AM, and 50% battery. The navigation bar has 'Back', 'Sign up', and 'Done' buttons. The form fields are: Email (example@example.), Username, Password, Phone (optional), and Picture (a placeholder icon). Below the form, a text block reads: 'Just a few quick steps to get you started. After signing up, you can find friends on Instagram, take & share photos, and see photos from around the world.'



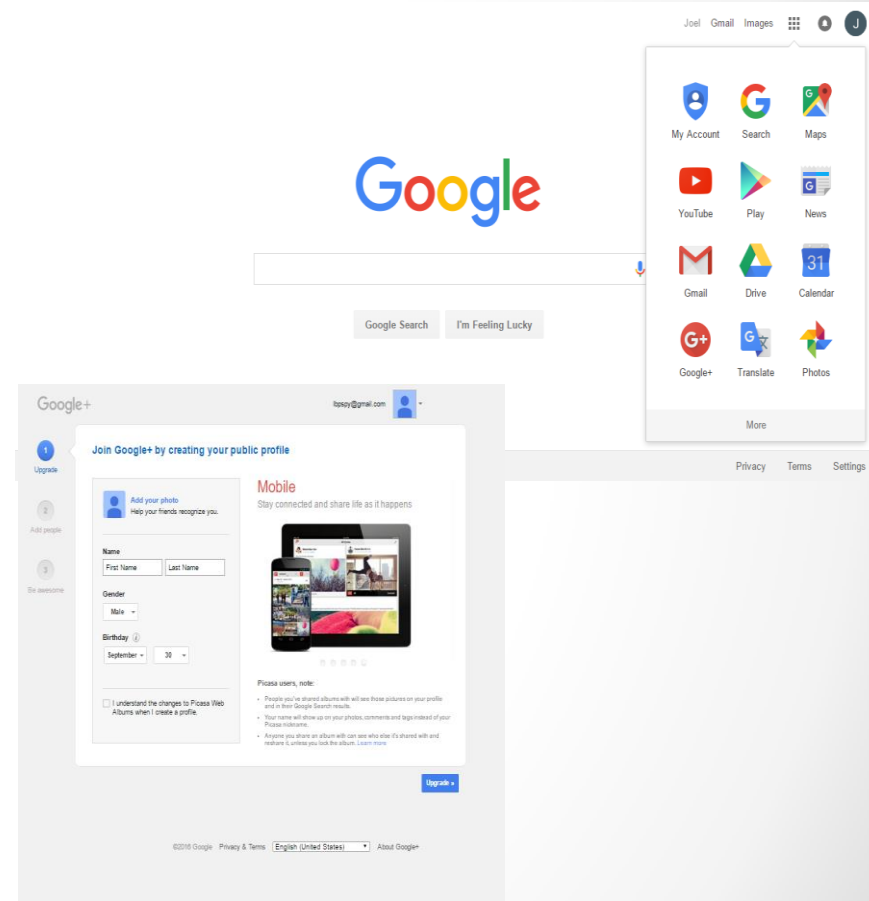
# Google+

- Email
- Information
- Community



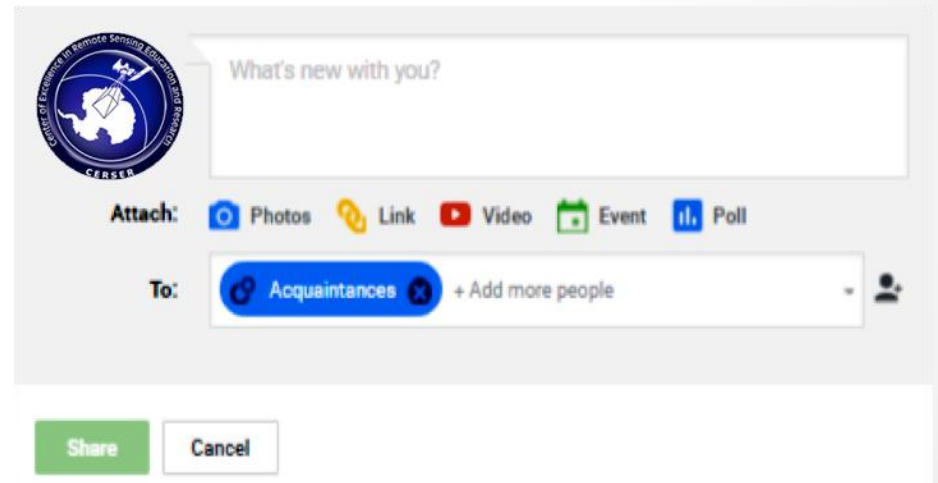
# Sign up for Google+

- Create an account
- Log into account
- Open more Apps
- Click on Google+
- Follow directions and upgrade your account



# Creating a Post

- Select text
- Type the message
- Add more content
- Select circles or individual
- Select share

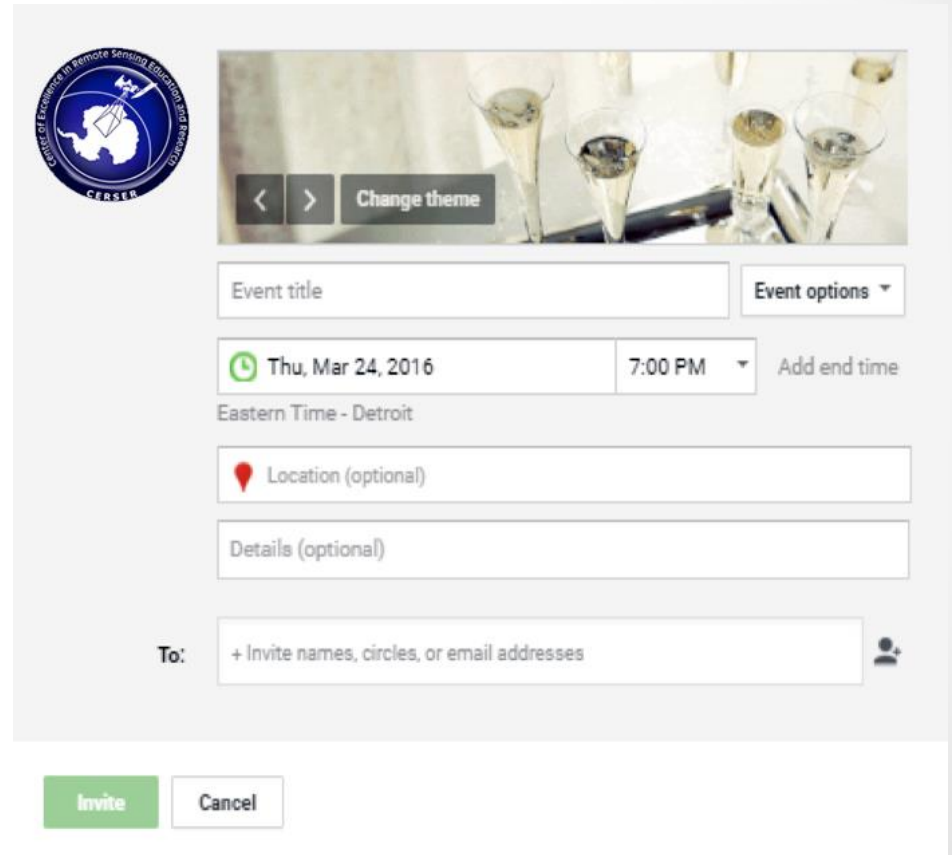


A screenshot of a social media post creation interface. On the left is a circular profile picture with a blue border and a globe icon, labeled 'CERSER'. To its right is a large text input area with the placeholder 'What's new with you?'. Below the input area is an 'Attach:' section with icons for Photos, Link, Video, Event, and Poll. Below that is a 'To:' section with a blue button labeled 'Acquaintances' and a '+ Add more people' link. At the bottom are two buttons: a green 'Share' button and a white 'Cancel' button.



# Creating an Event

- Select event
- Event Info

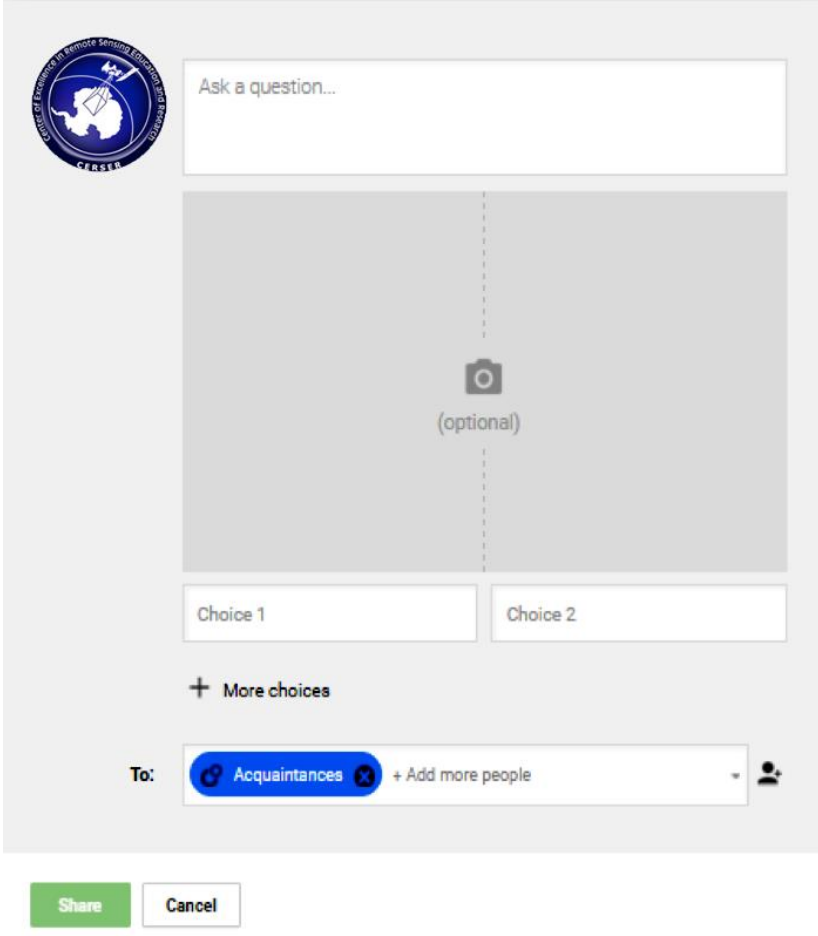


The screenshot shows the CERSER event creation interface. On the left is the CERSER logo, a blue circle with a white map of Africa and the text "Center of Excellence in Remote Sensing Education and Research" and "CERSER". To the right is a banner image of champagne glasses with a "Change theme" button. Below the banner are several input fields: "Event title" with a dropdown arrow, "Event options" with a dropdown arrow, a date field set to "Thu, Mar 24, 2016" with a clock icon, a time field set to "7:00 PM" with a dropdown arrow, and a text field for "Add end time". Below these is a location field with a red pin icon and the text "Location (optional)", followed by a "Details (optional)" field. At the bottom is a "To:" label and a large text input field with the placeholder "+ Invite names, circles, or email addresses" and a person icon. At the very bottom are two buttons: a green "Invite" button and a white "Cancel" button.



# Creating a Poll

- Select Poll
- Ask the question at the top text box
- Add image is desired
- Add answers
- Click more choices to add more choices
- Select circles and then share

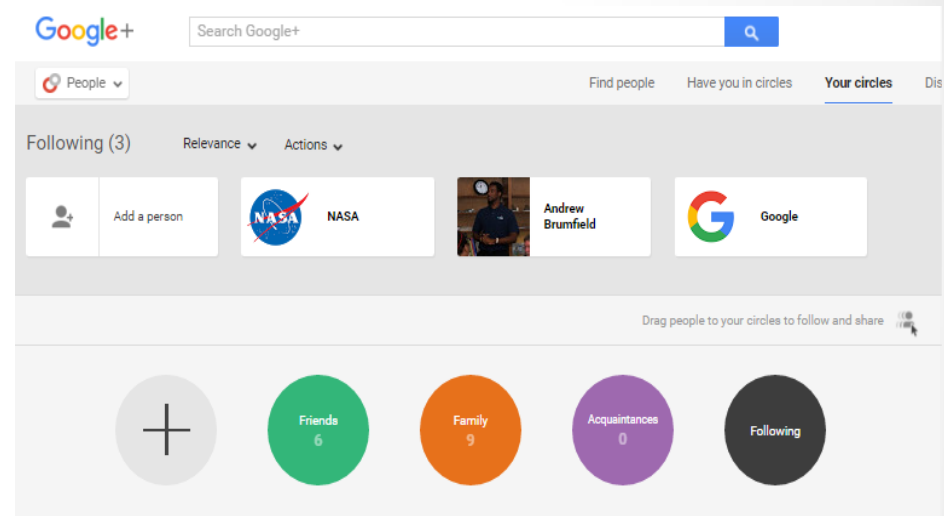


The screenshot shows the Facebook 'Create Poll' interface. At the top left is the profile picture of the user, which is the logo of the Center of Excellence in Remote Sensing, Education and Training (CEREST). Below the profile picture is a text box labeled 'Ask a question...'. Below the text box is a large gray area for an optional image, with a camera icon and the text '(optional)'. Below the image area are two text boxes labeled 'Choice 1' and 'Choice 2'. Below these is a link that says '+ More choices'. At the bottom is a 'To:' field with a dropdown menu showing 'Acquaintances' and a link to '+ Add more people'. At the very bottom are two buttons: 'Share' and 'Cancel'.



# Google Circles

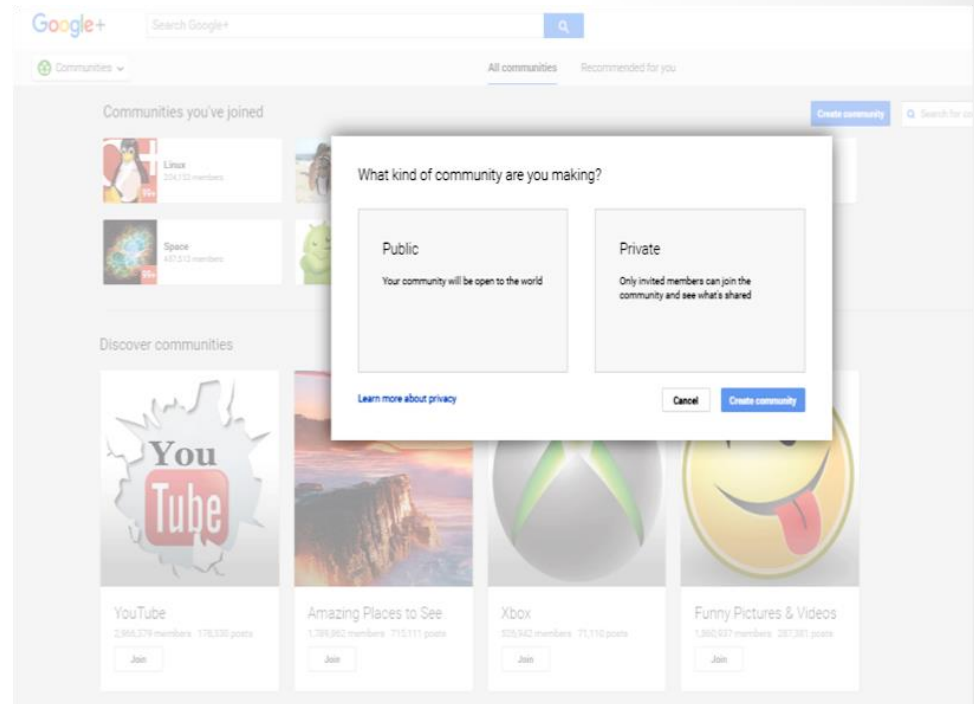
- Menu button
- Select People





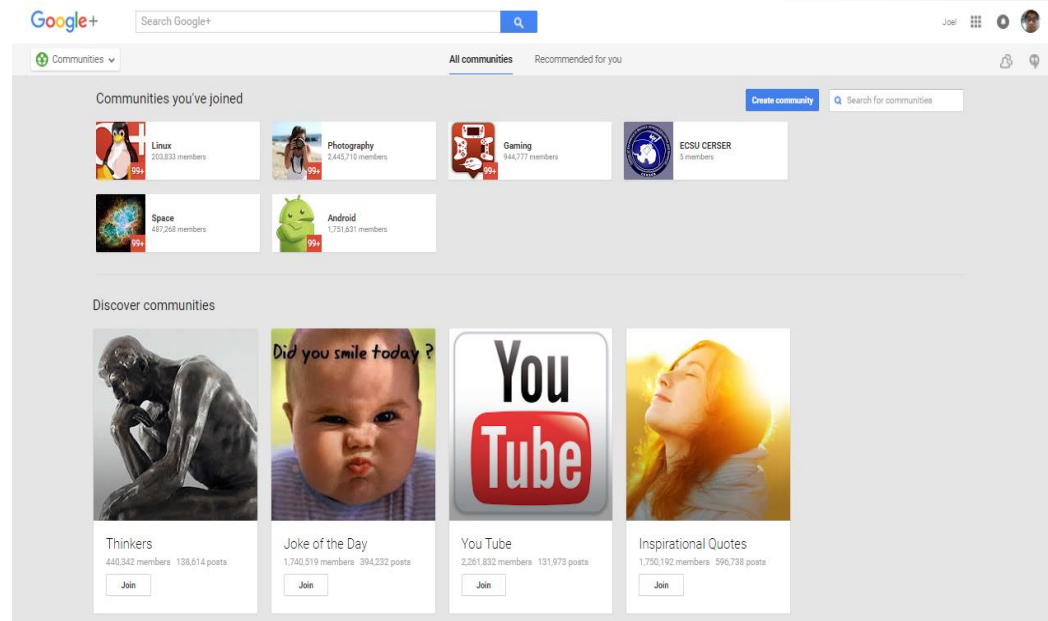
# Create Community

- Side menu
- Community
- Create community
- Private/Public
- Wizard



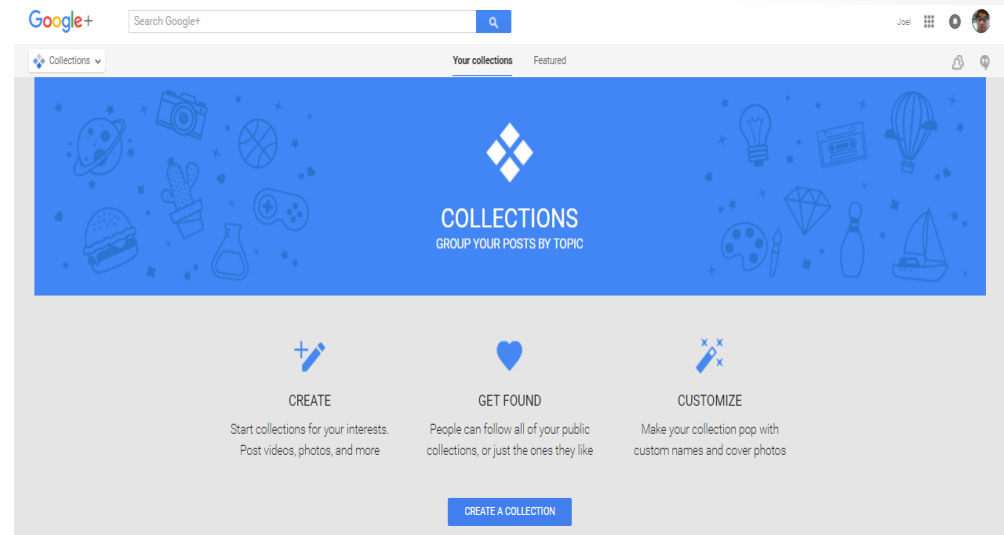
# Join a Community

- Click on the side menu
- Click on community
- Search for the community wanted
- Click join



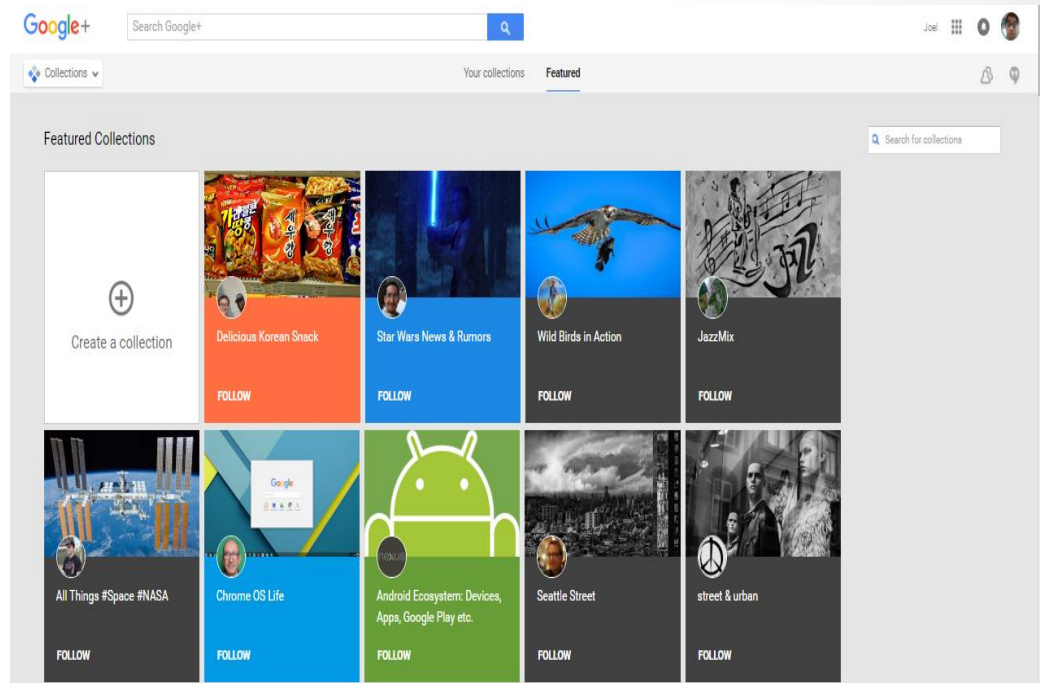
# Creating a Collection

- Side menu
- Collection
- Create Collection
- Follow the steps



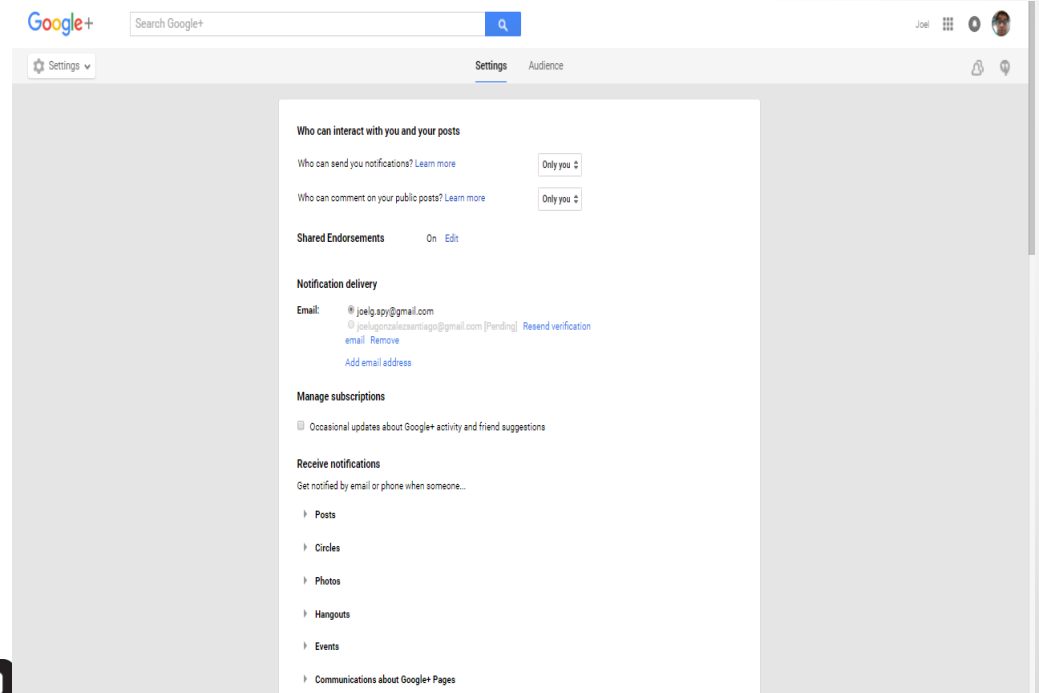
# Following a Collection

- Side menu
- Collection
- Featured tab
- Search/Select Follow



# Settings

- Side menu
- Settings
- Select the settings desired



# Effective Usage

- Use relevant hashtags
- Post to the relevant circles
- Be careful what is posted
- Include teasers about content
- Post at peak times
- Have consistency of when to post



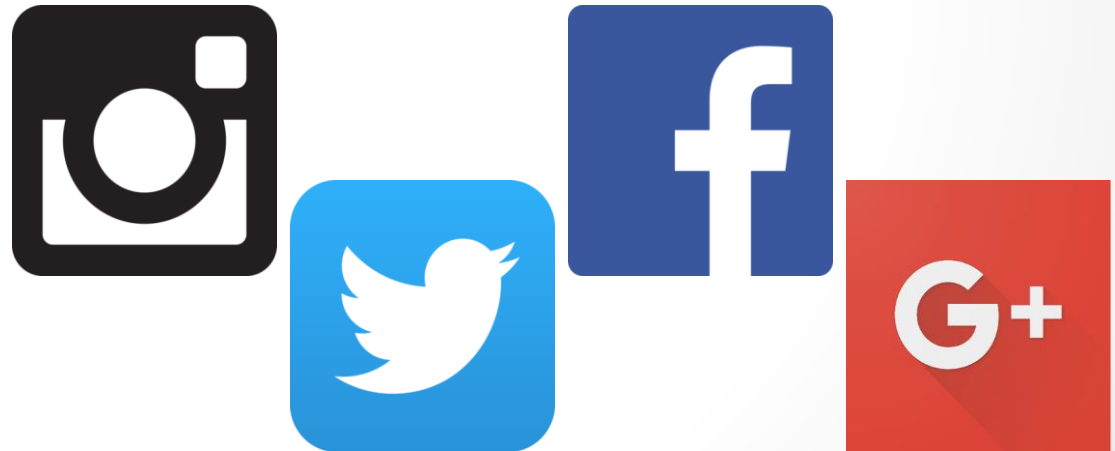
# Hashtags

- Promotion
- Number
- Events
- CERSER Gathering



# Results

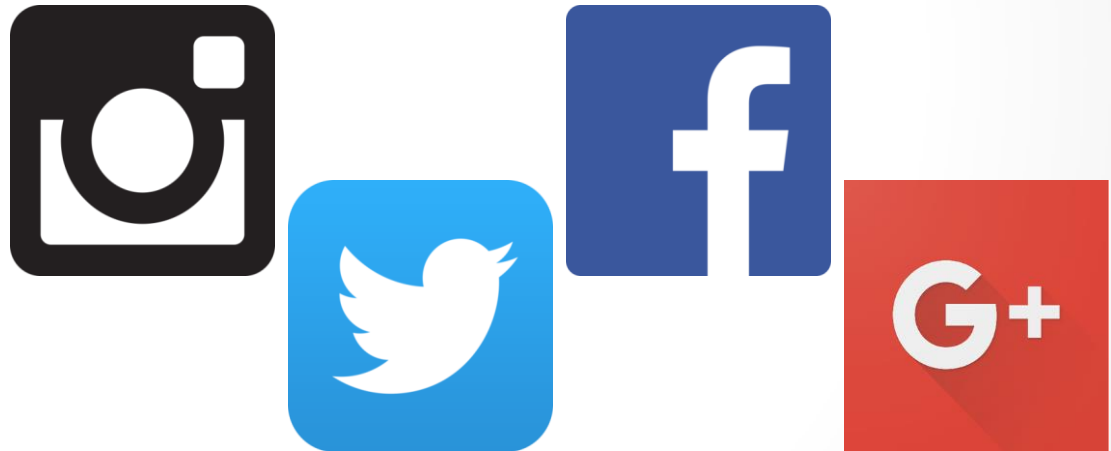
- Individual vs. Organization
- Facebook
- Twitter/Instagram
- Google+





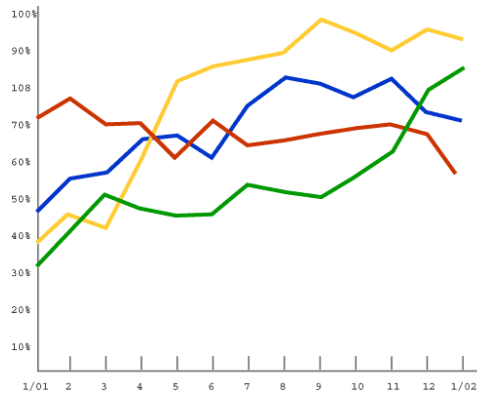
# Conclusion

- Comparison
- Facebook vs Twitter/Instagram
- Google+



# Future Works

- Analytics
- Event Usage
- Interlinking



**REU**  
**2016**



*Celebration of Women in Mathematics*



# Questions



