

# Virtual Communities and Social Networks: new resources for mountain rescue

---

Dale Atkins  
Mountain Rescue Association  
Alpine Rescue Team  
Colorado, USA



# Because of the Internet

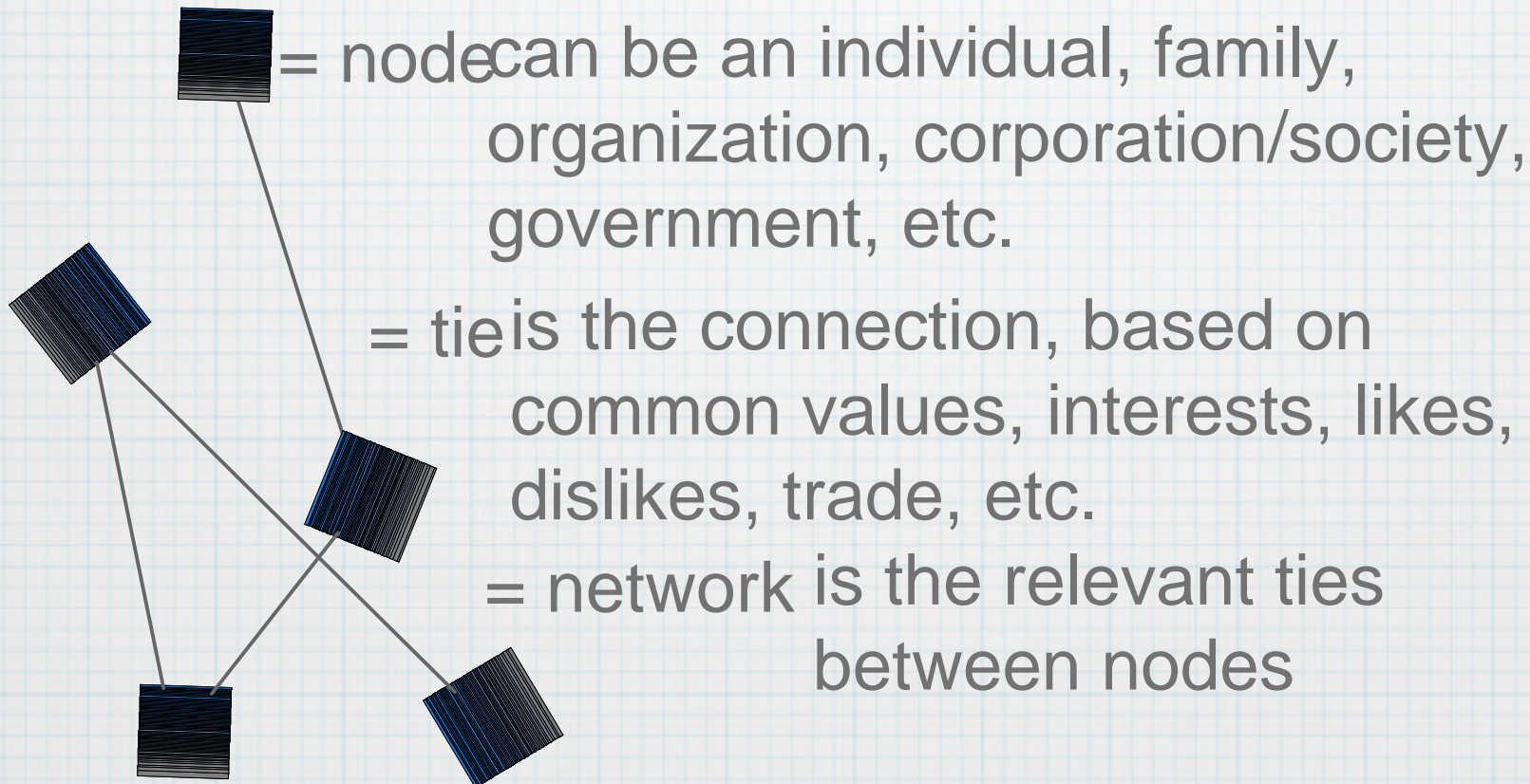
- \* more “volunteers” are offering to help
- \* in the past we often looked at these people as problem makers rather than problem solvers
- \* maybe it is time for us to change our attitude

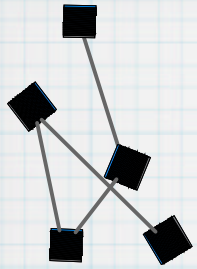
# Online (Virtual) Communities

- \* use computers and the Internet to share interests and activities
- \* interested in interests and activities of others

# Social Network

## Definition





# Social Network

## Development

pre-digital age

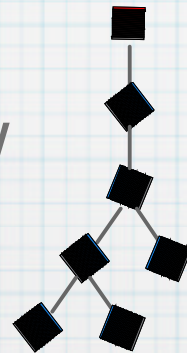
digital age

call to help

rescuers

nodes

few



information  
flow

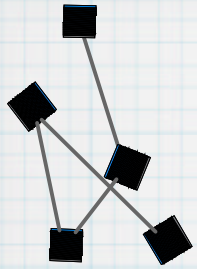
hierarchical

time

hours – days –  
weeks

# Social Network

## Development



pre-digital age

digital age

call to help

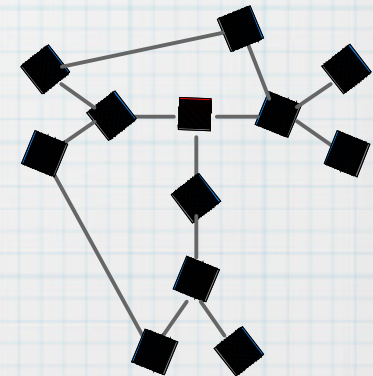
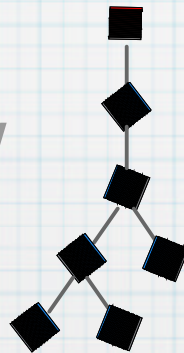
rescuers

friends, family, rescuers

nodes

few

many



information  
flow

hierarchical

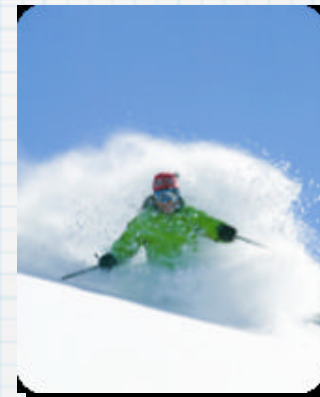
multidirectional

time

hours – days –  
weeks

minutes – hours

# Virtual Communities



use the [computer] and the  
mobile phone to  
communicate and share  
information



# Virtual Communities



# Virtual Communities

- \* have involved themselves directly and indirectly with professional search and rescue (SAR) responses
- \* have organized and conducted SAR operations
- \* sometimes with successes
- \* sometimes with problems

# Benefits

- \* access to larger social networks
- \* nearly instant communications
- \* knowledge
- \* skill
- \* technology
- \* manpower

# Problems

- \* poor information
- \* inexperience
- \* conflict
- \* public criticism

# Examples – USA

- \* Jim Gray – sailor – January 2007
- \* Steve Fossett – pilot – September 2007
- \* 3 snowboarders – avalanche – June 2008
- \* 1 climber – fall – June 2008
- \* 1 hiker – missing – August 2008



# Jim Gray

- \* internationally known computer scientist went missing off coast of California. (Jan 2007)
- \* search area 342.000 km<sup>2</sup>
- \* virtual community used Google Earth and Amazon's "Mechanical Turk"



# Jim Gray

- \* search area 342.000km<sup>2</sup>
- \* Google Earth created 100m wide search sectors
- \* Amazon's Mechanical Turk provided the Internet venue for people to sign up to help
- \* 3000+ people helped search by viewing satellite imagery

# Amazon's Mechanical Turk

Amazon Mechanical Turk - Welcome

https://www.mturk.com/mturk/welcome

amazonmechanical turk  
beta Artificial Intelligence

Your Account | HITs | Qualifications

Already have an account? Sign in as a Worker

Introduction | Dashboard | Status | Account Settings

**Mechanical Turk is a marketplace for work.**  
We give businesses and developers access to an on-demand, scalable workforce.  
Workers select from thousands of tasks and work whenever it's convenient.  
**22,732 HITs** available. [View them now.](#)

## Make Money by working on HITs

HITs - *Human Intelligence Tasks* - are individual tasks that you work on. [Find HITs now.](#)

**As a Mechanical Turk Worker you:**

- Can work from home
- Choose your own work hours
- Get paid for doing good work

**Find an interesting task** → **Work** → **Earn money**

## Get Results from Mechanical Turk Workers

Ask workers to complete HITs - *Human Intelligence Tasks* - and get results using Mechanical Turk. [Get started.](#)

**As a Mechanical Turk Requester you:**

- Have access to a global, on-demand, 24 x 7 workforce
- Get thousands of HITs completed in minutes
- Pay only when you're satisfied with the results

**Fund your account** → **Load your tasks** → **Get results**

# Does it work?

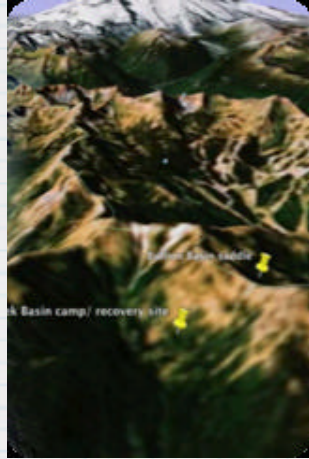
- \* sometimes...has lead to frustration
- \* little understanding of what “requesters” are looking for
- \* poor user interface
- \* lack of meaning in what others find



# Steve Fossett

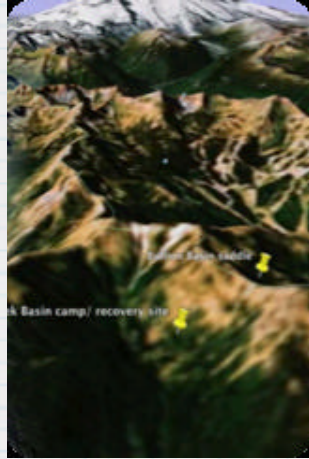
Millionaire adventurer went missing  
in a small plane over Sierra  
Mountains of Nevada and California  
(Sept 2007)

- \* search area 16.000 km<sup>2</sup>
- \* virtual community used Google Earth and Amazon's "Mechanical Turk"
- \* "tens of thousands" signed up to



# 3 snowboarders – Washington state

- \* went missing on 2 Dec. 2007
- \* search area 260 km<sup>2</sup>, 40+ major avalanches
- \* formal and large search effort suspended 8 Dec. 2007



# 3 snowboarders – Washington state

- \* formal search to resume in July 2008
- \* mid June 2008 members of [www.turn-all-year.com](http://www.turn-all-year.com) organize search effort
- \* coordinate with law enforcement and ski patrol
- \* conduct search and find buried bivouac with 3 bodies



# 1 climber killed – Colorado

- \* group called friend immediately after accident



- \* friend posted report on Internet with subject's name

- \* rescue team and police inundated with telephone calls – delayed response

# 1 Missing Hiker


14ers.com • View topic - Missing hiker - CCSAR needs info!

◀ ▶ ↺ ⌂ +

http://14ers.com/phpBB3/viewtopic.php?t=15176

Google

Epson scanner support colo snotel RECCO\_DB\_temp SWREG - Ord...nfirmation Niwot Ridge The Morning Report ClassesUSA Apple News (165) .Mac Amazon eBay >>

Welcome to the forum!

Search... Search  
Advanced search

Forum index < Colorado < 14er Information / Conditions

14ers Toolbox FAQ Members Register Login

Missing hiker - CCSAR needs info!


POSTREPLY ↵ Search this topic... Search

45 posts • Page 1 of 3 • 1 2 3

**Missing hiker - CCSAR needs info!**  
by **Mick** on Sat Aug 09, 2008 6:17 pm

Hi,  
  
I am a member of Custer County Search and Rescue, and we have a search in progress in the Crestone Needle area. Any information anyone can provide would be greatly appreciated. Here are the details:  
  
Our subject is 6'3", 200 lbs., white male. He was wearing khaki pants, light-colored long-sleeve t-shirt, possibly a black lightweight hooded parka, and a light brown baseball cap. He is in his 40s and is described as being in good physical shape.  
  
He and his companion were attempting Crestone Needle by the standard route on Friday. He was last seen by his companion somewhere between Broken Hand Pass and the gully early to mid-morning.  
  
His companion stopped the climb at that point, and the subject joined a father/son team to continue the climb. The father/son team returned and told the subject's companion (who was still above Broken Hand Pass) that the subject was descending behind them - but, in fact the subject never made contact with his climbing partner.  
  
If anyone has any information that might be helpful, please contact Custer County Search and Rescue ASAP at 719-783-0442. We'll continue to monitor this thread, but a phone call will get us info more quickly.  
  
Thanks,  
Mick Backsen  
CCSAR

**Mick**  
Posts: 2  
Joined: Sat Aug 09, 2008 6:01 pm  
[14er Peak List](#)



# Using a Virtual Community

14ers.com • view topic - missing hiker - CCSAR needs info!

http://14ers.com/phpbb3/viewtopic.php?p=55176

Google

Epson scanner support colo snotel RECCO\_DB\_temp SWREG - Ord...nfirmation Niwot Ridge The Morning Report Classe SA Apple News (165) .Mac Amazon eBay

14ers.com Welcome to the forum!

Search... Search Advanced search

Forum index < Colorado < 14er Information / Conditions

14ers Toolbox FAQ Members Register Login

Missing hiker - CCSAR needs info!

POSTREPLY Search this topic... Search

45 posts • Page 1 of 3 • 1 2 3

Missing hiker - CCSAR needs info!

by Mick on Sat Aug 09, 2008 6:17 pm

Hi,

I am a member of Custer County Search and Rescue, and we have a search in progress in the Crestone Needle area. Any information anyone can provide would be greatly appreciated. Here are the details:

Our subject is 6'3", 200 lbs., white male. He was wearing khaki pants, light-colored long-sleeve t-shirt, possibly a black lightweight hooded parka, and a light brown baseball cap. He is in his 40s and is described as being in good physical shape.

He and his companion were attempting Crestone Needle by the standard route on Friday. He was last seen by his companion somewhere between Broken Hand Pass and the gully early to mid-morning.

His companion stopped the climb at that point, and the subject joined a father/son team to continue the climb. The father/son team returned and told the subject's companion (who was still above Broken Hand Pass) that the subject was descending behind them - but, in fact the subject never made contact with his climbing partner.

If anyone has any information that might be helpful, please contact Custer County Search and Rescue ASAP at 719-783-0442. We'll continue to monitor this thread, but a phone call will get us info more quickly.

Thanks,  
Mick Backsen  
CCSAR

Mick  
Posts: 2  
Joined: Sat Aug 09, 2008 6:01 pm  
14er Peak List

state the problem

# Using a Virtual

14ers.com • View topic - Missing hiker - CCSAR needs info!

http://14ers.com/phpBB3/viewtopic.php?t=15176

Epson scanner support colo snotel RECCO\_DB\_temp SWREG - Ord...nfirmation Niwot Ridge The Morning Report ClassesUSA Apple News (165) .Mac Amazon eBay

14ers.com Welcome to the forum!

Search... Search Advanced search

Forum index < Colorado < 14er Information / Conditions

14ers Toolbox FAQ Members Register Login

Missing hiker - CCSAR needs info!

POSTREPLY Search this topic... Search 45 posts Page 1 of 3 • 1 2 3

**Missing hiker - CCSAR needs info!**

by Mick on Sat Aug 09, 2008 6:17 pm

Hi,

I am a member of Custer County Search and Rescue, and we have a search in progress in the Crestone Needle area. Any information anyone can provide would be greatly appreciated. Here are the details:

Our subject is 6'3", 200 lbs., white male. He was wearing khaki pants, light-colored long-sleeve t-shirt, possibly a black lightweight hooded parka, and a light brown baseball cap. He is in his 40s and is described as being in good physical shape.

He and his companion were attempting Crestone Needle by the standard route on Friday. He was last seen by his companion somewhere between Broken Hand Pass and the gully early to mid-morning.

His companion stopped the climb at that point, and the subject joined a father/son team to continue the climb. The father/son team returned and told the subject's companion (who was still above Broken Hand Pass) that the subject was descending behind them - but, in fact the subject never made contact with his climbing partner.

If anyone has any information that might be helpful, please contact Custer County Search and Rescue ASAP at 719-783-0442. We'll continue to monitor this thread, but a phone call will get us info more quickly.

Thanks,  
Mick Backsen  
CCSAR

**Mick**  
Posts: 2  
Joined: Sat Aug 09, 2008 6:01 pm  
[14er Peak List](#)

# Using a Virtual

14ers.com • View topic - Missing hiker - CCSAR needs info!

http://14ers.com/phpBB3/viewtopic.php?t=15176

Epson scanner support colo snotel RECCO\_DB\_temp SWREG - Ord...nfirmtion Niwot Ridge The Morning Report ClassesUSA Apple News (165) .Mac Amazon eBay

14ers.com Welcome to the forum!

Search... Search  
Advanced search

Forum index < Colorado < 14er Information / Conditions

14ers Toolbox FAQ Members Register Login

Missing hiker - CCSAR needs info!

POSTREPLY Search this topic... Search

45 posts • Page 1 of 3 • 1 2 3

**Missing hiker - CCSAR needs info!**  
by Mick on Sat Aug 09, 2008 6:17 pm

Hi,

I am a member of Custer County Search and Rescue, and we have a search in progress in the Crestone Needle area. Any information anyone can provide would be greatly appreciated. Here are the details:

Our subject is 6'3", 200 lbs., white male. He was wearing khaki pants, light-colored long-sleeve t-shirt, possibly a black lightweight hooded parka, and a light brown baseball cap. He is in his 40s and is described as being in good physical shape.

He and his companion were attempting Crestone Needle by the standard route on Friday. He was last seen by his companion somewhere between Broken Hand Pass and the gully early to mid-morning.

His companion stopped the climb at that point, and the subject joined a father/son team to continue the climb. The father/son team returned and told the subject's companion (who was still above Broken Hand Pass) that the subject was descending behind them - but, in fact the subject never made contact with his climbing partner.

If anyone has any information that might be helpful, please contact Custer County Search and Rescue ASAP at 719-783-0442. We'll continue to monitor this thread, but a phone call will get us info more quickly.

Thanks,  
Mick Backsen  
CCSAR

Mick  
Posts: 2  
Joined: Sat Aug 09, 2008 6:01 pm  
14er Peak List

where last seen

# Using a Virtual

14ers.com • View topic - Missing hiker - CCSAR needs info!

http://14ers.com/phpBB3/viewtopic.php?t=15176

Epson scanner support colo snotel RECCO\_DB\_temp SWREG - Ord...nfirmation Niwot Ridge The Morning Report ClassesUSA Apple News (165) .Mac Amazon eBay

14ers.com Welcome to the forum!

Search... Search  
Advanced search

Forum index < Colorado < 14er Information / Conditions

14ers Toolbox FAQ Members Register Login

Missing hiker - CCSAR needs info!

POSTREPLY Search this topic... Search

45 posts • Page 1 of 3 • 1 2 3

**Missing hiker - CCSAR needs info!**  
by Mick on Sat Aug 09, 2008 6:17 pm

Hi,

I am a member of Custer County Search and Rescue, and we have a search in progress in the Crestone Needle area. Any information anyone can provide would be greatly appreciated. Here are the details:

Our subject is 6'3", 200 lbs., white male. He was wearing khaki pants, light-colored long-sleeve t-shirt, possibly a black lightweight hooded parka, and a light brown baseball cap. He is in his 40s and is described as being in good physical shape.

He and his companion were attempting Crestone Needle by the standard route on Friday. He was last seen by his companion somewhere between Broken Hand Pass and the gully early to mid-morning.

His companion stopped the climb at that point, and the subject joined a father/son team to continue the climb. The father/son team returned and told the subject's companion (who was still above Broken Hand Pass) that the subject was descending behind them - but, in fact the subject never made contact with his climbing partner.

If anyone has any information that might be helpful, please contact Custer County Search and Rescue ASAP at 719-783-0442. We'll continue to monitor this thread, but a phone call will get us info more quickly.

Thanks,  
Mick Backsen  
CCSAR

**Mick**  
Posts: 2  
Joined: Sat Aug 09, 2008 6:01 pm  
[14er Peak List](#)

who to call with information

# Virtual Communities

a new resource for mountain rescue

- \* should have a small and creditable presence on web sites
- \* educate community how to report mountain accidents
- \* educate community how mountain rescue works
- \* be willing to accept their assistance

# Virtual Communities & Mountain Rescue

can work together to help those in need!