Systems for Improving Online Discussion

Amy X. Zhang, MIT CSAIL
Technology has improved how we do many things collectively.
With new tools, we are building on each other's knowledge and work to do amazing things!
Yet why does it seem like online discussion has progressively worsened?
Is Email Making Professors Stupid?

It used to simplify crucial tasks. Now it’s strangling scholars’ ability to think.
Drowning in a sea of messaging apps

By MICHELLE QUINN
PUBLISHED: November 3, 2016 at 11:50 am | UPDATED: November 4, 2016 at 4:38 am

We’ve got too many ways to talk digitally. WhatsApp, HipChat, Slack, Facebook Messenger and more.

Just when I thought I had more than enough methods for pinging and texting, Microsoft upended the communication basket. This week, the software giant announced Microsoft Teams, a workplace tool for multiple people to chat and collaborate online.
How E-Mail Killer Slack Will Change the Future of Work

Samuel P. Jacobs / San Francisco
Oct 29, 2015

People ask two questions about Slack, the interoffice chat software used by some of the world’s most closely watched companies. The first is whether the 21-month-old startup is actually worth its $2.8 billion valuation. The second is whether Slack is changing how much of the world works.

The first question is easier to answer. Even in an economy that has minted at
Slack won’t change the enterprise unless we address Slack overload – the Pingpad view

By Jon Reed  April 27, 2018

SUMMARY: Slack adoption can energize a team, but then Slack overload sets in. Pingpad CEO Ross Mayfield spoke with me about the issues that cause Slack overload, and how knowledge capture and project tools can make a difference.

I’ve seen the stickiness – and perils – of Slack firsthand. Yes, the mobile immediacy of group messaging can advance projects.

But when Slack adoption picks up, and a barrage of notifications heads your way, you get a taste of Slack overload. So how do you avoid it?
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I’ve seen the stickiness — and perils — of Slack firsthand. Yes, the mobile immediacy of group messaging can advance projects.

But when Slack adoption picks up, and a barrage of notifications hounds your way, you get a taste of what Slack overload looks like.

Pingpad installs a chatbot on Slack that answers questions and provides soothing words to employees.

I’ve seen all sorts of things out there to help with this: people are using Slack for their note taking, or their calendar, or their intranet. But the idea of having a chatbot that can write emails and answers questions for you... well, that’s something different.

But can these tools save Slack from becoming a messaging zombie? That’s the hard part.

I’ve been thinking about how we can make Slack better, and how we can make it more useful for everyone who’s using it. There are a lot of different tools out there that can help with this, but I’ve found that the best ones are the ones that are easy to use, and that can be customized to fit your needs.

One of the best things that I’ve come across is Slack’s integrations, which allow you to connect Slack with other apps and services. This can be really helpful, especially if you use a lot of different tools in your workflow. By connecting these tools, you can automate tasks and reduce the amount of time you spend on mundane work.

Another thing that I’ve found to be really useful is the ability to create custom apps on Slack. These apps can be tailored to your specific needs, and can make it much easier to work with Slack.

But what about those pesky notifications? How can we make sure that users are only notified when they need to be? This is something that we’ve been working on with our partners, and we’ve come up with a few solutions.

One idea is to create a notification hierarchy, where users can choose which notifications they want to receive and when. This can be really helpful, especially if you have a lot of different channels and teams to keep track of.

Another solution is to use a notification suppression feature, which automatically ignores notifications that are less important. This can help to reduce the amount of clutter that users see, and make it easier for them to focus on what’s really important.

In conclusion, Slack is a great tool, but it can definitely be improved. By creating custom apps and integrations, we can make it more useful for everyone who’s using it. And by using notification suppression and hierarchy, we can make sure that users are only notified when they need to be. With these changes, we can make Slack a much more effective tool for collaboration and communication.
How to Make Online Discourse Less of a Trash Fire in 2016

Don't blame everything on the trolls—it's everyone's fault that the internet is such a mess.

KEEP CALM
Comments are making the internet worse. So we got rid of them.

I used to rely on Above the Law commenters for tips. Now they just spew bile.

Comment sections are poison: handle with care or remove them.

Comments are often regarded as a right but they can do more harm than good. In the absence of strict moderation, we'd be much better off without them.
Exclusive poll: America sours on social media giants

Does social media do more to help or hurt democracy and free speech?

ALL ADULTS

- Help: 53% (Nov. 2017) to 57% (Nov. 2018)
- Hurt: 43% (Nov. 2017) to 40% (Nov. 2018)

DEMOCRATS

- Help: 61% (Nov. 2017) to 50% (Nov. 2018)
- Hurt: 37% (Nov. 2017) to 48% (Nov. 2018)

INDEPENDENTS

- Help: 55% (Nov. 2017) to 58% (Nov. 2018)
- Hurt: 42% (Nov. 2017) to 39% (Nov. 2018)

REPUBLICANS

- Help: 52% (Nov. 2017) to 69% (Nov. 2018)
- Hurt: 45% (Nov. 2017) to 30% (Nov. 2018)

Data: SurveyMonkey poll conducted Nov. 9 to 13 among 3,622 U.S. adults with a modeled error estimate of ±2.5 percent; See methodology. Chart: Lazaro Gamio/Axios
What problems do online discussion systems have?
Scale of conversation
Scale of conversation
Perhaps I am being too cynical, but the author of the article strikes me as being out of touch with the realities faced by those of us in high-powered, private sector industries such as Investment Banking, Medicine, Consulting, Lawyer, as well as Corporate Executives. The Ivy League and the Government, while challenging environments, do not have the level of job insecurity that private sector workers have to deal with, nor are they organizations that will collapse if the worker and fellow colleagues don't compete at a superior to stay in business.

I do, however, applaud the sentiments conveyed in the article about adjusting the workplace to be more family-friendly. The experience I have had working in my (I-banking) is that it filled by armies of 'super-employees'. These individuals, usually men, typically have stay-at-home wives and are able to out-compete their colleagues with working spouses because they can work more hours. The flexible work arrangement is evident in this regard. However, these policies are not going to alter the fact that these 'top jobs' still require an intense degree of competition and those who 'give their all' are going to continue to prevail.

TheArkansasTraveler · 5 years ago

Thank you, I, too, appreciated this article, but what are Ms. Slaughter’s recommendations for the rest of us, who are raising children with two 40 hour-a-week jobs, and still barely making ends meet? Flexibility will not help the elementary school teacher or the cashier at Wal-Mart for whom face-time is ‘the essential part of the job.

Most Americans are struggling with much more basic, but equally thorny problems: how to get a spot in a quality daycare, what to do with kids during the day.
Scale of conversation
Scale of conversation
Scale of conversation
Compartmentalization
Compartamentalization → Loss of Context
Compartmentalization → Loss of Context
Compartmentalization → Loss of Context
Competing norms

Arguing on the internet
Yeah, it's pretty much like this.
Competing norms

Arguing on the internet

Yeah, it's pretty much like this.

tensions
Competing norms

Arguing on the internet
Yeah, it's pretty much like this.

tensions
bickering
Competing norms

Arguing on the internet

- tensions
- bickering
- polarization

Yeah, it's pretty much like this.
bad actors
trolling
misinformation
Why isn’t online discussion getting better?
People + Tools -> Better Structure
We need **new tools** that **empower people** to:

**structure** and **tailor** their discussions and discussion environments &

**build on** each other’s work.
Tools that give people the power to...

- Summarize large discussions
  - Discussion threads
  - Group chat

- Place discussions in the right context
  - Educational materials
  - Webpages

- Configure the delivery of content
  - Harassment
  - Mailing Lists
Tools that give people the power to...

**Scale**

- Summarize large discussions
- Discussion threads

**Place discussions in the right context**

- Educational materials

**Configure the delivery of content**

- Harassment
- Webpages
- Mailing Lists
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Mailing Lists
System Building

Deployment to Communities

Formative Needfinding
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CSCW '17

CSCW '18

CSCW '16

CSCW '15

Group chat

Webpages

Mailing Lists
FORUM

unwieldy

sprawling
FORUM
unwieldy
sprawling
original voices
different perspectives
FORUM

unwieldy

sprawling

original voices
different perspectives

Walsall

Dewey was invited for a four day summer trial at Aston Villa at the age of 15 but only turned up for the final day as he “wanted to go to the park where all the girls were” rather than play football, and was consequently sent away. Having joined Cheimley Town, he was scouted by Walsall head of youth Mick Haizall, who only attended the game Dewey was playing in because his son was also playing and due to the game he was scheduled to attend being postponed. Dewey was playing while drunk, but scored seven goals in an 11-4 win. He was offered a trial by the then League Two club, but only attended after his Cheimley manager got him out of bed and paid for his taxi[1]. After signing for Walsall on 18 December 2006, Dewey was instantly sent to Halesowen Town on loan for the rest of the 2006-07 season.[1]
WIKI

FORUM

unwieldy

sprawling

original voices
different perspectives

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no personality
neutral
short
easy to read

unwieldy
sprawling
original voices
different perspectives
Why haven't list features on Facebook and/or Twitter caught on?

A common thread is that Twitter lists haven't caught on in a huge way because the all-consuming primary timeline seems sufficient for most. Some power users use Twitter lists a great deal and find them productive, but as Nick Kalen said, the Twitter list user interface (UI) is not slick enough.

20 Answers

Robert Scoble, I study tech for Rackspace as its Startup Liaison Officer.

It's not because it takes work. I did the work, and continue to do so. My lists at http://twitter.com/#!/scoblezer... are followed by thousands of people (and I'm on about 15,000 lists) so some people ARE using them.

There are several problems with lists on Twitter:

1. When you follow one nothing happens. Your home feed doesn't change (it should). You don't automatically follow the people on the list (that should happen).
Why haven't list features on Facebook and/or Twitter caught on?

Answer Wiki

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There are several problems with lists on Twitter:

1. When you follow one nothing happens. Your home feed doesn't change (it should).
2. You can't view the list from the list web page (that's probably why few people do).
3. Your list doesn't show up in your homefeed (that's probably why few people do).
4. You can't see the list when someone follows you (that's probably why few people do).
Recursive Summarization
Recursive Summarization
Recursive Summarization
Recursive Summarization
Summary Tree
Summary Tree
Madrid -- 100% Sostenible

Código de la propuesta: MAD-2015-09-199

Queremos un Madrid que no amanezca con una bolsa de contaminación gris, que desafíe a las eléctricas, potencie las renovables y se asegure de que a ninguna familia le corte la luz este invierno.

¿Cómo?

Pedíándole al Ayuntamiento de Madrid que se comprometa a firmar el manifiesto "MADRID CIUDAD SOSTENIBLE" y a ponerlo en marcha -- Exigimos el cumplimiento de los 14 puntos siguientes:

1. Desarrollar campañas de sensibilización, formación y fomento de la cultura energética en todos los ámbitos de la ciudad.
2. Contratar la energía eléctrica municipal con garantía de origen 100% renovable.
3. Establecer un equipo de trabajo transversal para la elaboración, ejecución y seguimiento de los planes estratégicos.
4. Facilitar la obtención de forma regular de los datos energéticos y económicos necesarios para su gestión.
5. Diseñar e implantar acciones de eficiencia energética en las instalaciones municipales privatizando cambios de hábitos para eliminar los derroches en el consumo. Los ahorrados conseguidos por el cambio de hábitos se invertirán, en parte o en su totalidad, en nuevas medidas de eficiencia energética.
6. Implementar programas de eficiencia energética en los centros educativos, como el proyecto 50/50 -- consistente en devolver el 50% de los fondos a los estudiantes que ahorren energía. --
Madrid -- 100% Sostenible

Código de la propuesta: MAD-2015-09-199

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6. Implantar programas de eficiencia energética en los centros educativos, como el proyecto 50/50 -- consistente en devolver el 50% de los ahorros a la escuela y revertir la otra mitad en nuevas medidas de ahorro, eficiencia y renovables en el mismo centro.
7. Aplicar medidas de lucha contra la pobreza energética: transición del bono social, etc.
8. Diseñar y ejecutar todas las construcciones u obras municipales nuevas con criterios de consumo de energía casi nulo.
9. Implementar acciones de movilidad sostenible: fomento de transporte público, uso de vehículos sostenibles, peatonalización de las calles, etc.
Madrid -- 100% Sostenible

Código de la propuesta: MAD-2015-05-199

Queremos un Madrid que no asemeje con una boina de contaminación gris, que desafíe a las eléctricas, potencie las renovables y se asocíe de que a ninguna familia le corten la luz este invierno.

¿Cómo?

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4. Facilitar la obtención de forma regular de los datos energéticos y económicos necesarios para su gestión.
5. Diseñar e implantar acciones de eficiencia energética en las instalaciones municipales priorizando cambios de hábitos para que los gastos del ayuntamiento y los consumos del municipio sean más eficientes.

https://decide.madrid.es/es/10324
Madrid -- 100% Sostenible

Y qué opinás del teletrabajo? Algo tan sencillo y que debería plantearse el Ayuntamiento. Para reducir la contaminación hay que ir a la raíz. El ayuntamiento podría priorizar a las empresas que ofrecen el teletrabajo a sus empleados. La mayor parte de desplazamientos son por causa del trabajo.

Tags: TELETRABAJO, AYUNTAMIENTO, DESPLAZAMIENTOS

COMMENT BY NULL (243 LIKES)

Creo que una forma de facilitar que hubiera menos contaminación sería intentar reducir las emisiones de los vehículos a motor. ¿Cómo? Da hecho durante todo el día por toda la ciudad aparecen vehículos que se dedican a distribuir, cargar y descargar, llevar cosas de un sitio a otro... Puede que sean los vehículos más numerosos. Solución, no para ahora, para un futuro. Que estos vehículos sean eléctricos.

Tags: ENERGÍA SUSTENTABLE, COCHES

COMMENT BY LUIS ALBARRANA (57 LIKES)

Deberíamos exigir que se frenen este tipo de vehículos, para un futuro, pero muy cercano.

Tags: VEHÍCULOS LIMPIOS
Wikum was faster for summarizing than GDocs even with the same groups of people summarizing.

“I felt it was helpful for Wikum but not really in the Google Doc. There, there were people rambling...It was kind of a mess. Because the summaries were right there in Wikum and directly related to the comments, [they were] much smaller summaries and a lot more helpful.”
Democratic cities are not just about talking but also listening and understanding.

Would you imagine a face to face debate without facilitators, mediators and reporters?

This is how Wikum helps people understand each other in digital discussions.
Democratic cities are not just about talking but also listening and understanding.

Would you imagine a face to face debate without facilitators, mediators and reporters?

Citizen Democracy Initiatives

INVOLVED

National Research Council Canada

Resilience Dialogues
wikum
Summarize large discussion threads.

wikum.org
Tools that give people the power to...

Summarize large discussions

Discussion threads

Place discussions in the right context

Educational materials

Configure the delivery of content

Harassment

Group chat

Webpages

Mailing Lists
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When you try and catch up on what's going on in the group chat

@berches
Enriching group chat with *markup*
Enriching group chat with *markup*
Enriching group chat with markup
Enriching group chat with markup
SummaryBot
@SummaryBot

SummaryBot 2:33 AM @bawolf asks if there is a way to set alerts in logstash so that the emails...
Message SummaryBot.

Some more screenshots:

- abstractive
- extractive
- discourse acts
- high level signals
Structure

- abstractive
- extractive
- discourse acts
- high level signals
Structure

discourse acts

high level signals

Context

extractive

abstractive
abstractive
discourse acts
extractive
high level signals
Context
Structure
TL;DR;

Tilda

Emoji reaction tags

Fiona Guiry 10:48 AM
I like this new reacji thing
Emoji reaction tags

I like this new reacji thing

Slash command notes
Emoji reaction tags

🌟 action 🌟 decision 🌟 start
❓ question 🕵️‍♂️ idea 🕵️ end
❗ answer ✨ info 🔥 topic

Slash command notes

Fiona Guier 10:48 AM
I like this new reacji thing

search

Frequently Used

Emoji Deluxe™

People

Commands matching "?="

/title

/-addtag optional: [tag] Tag this conversation with keywords.
/-addaction [action item]
Add an action item.
/-adddecision [decision]
Add a decision that was made.
/-addidea [idea]
Add an idea or proposal item.
/-addinfo [info item]
Add an info item.
/-addquestion [question]
Add a question or request for help.
/-addanswer [answer]
Add an answer or suggestion to a question.
/-addtopic [topic]
Set the topic of conversation.
/-end
#general

Amy 6:53 PM
It'd probably be better if we just changed the lampshade

Justin 6:43 PM
I'm always getting sleepy in there.

Ally 6:44 PM
omg I was so sleepy today too

Justin 6:44 PM
sleepy

Amy 6:44 PM
awww cute

Cassie 6:44 PM
hehe:

Amy 6:44 PM
@Ally do you remember last week when John started snoring during that presentation?

Cassie 6:45 PM
I like the new conference room. The projector is great.
Amy 6:44 PM
awww cute

cassie 6:44 PM
hehe

Amy 6:44 PM
@Ally do you remember last week when John started snoring during that presentation?

cassie 6:45 PM
I like the new conference room. The projector is great.

Hey guys
“We really didn’t have a good system...Tilda made it muuuuch easier for us to fill someone in on something that happened...

Overall I think Tilda greatly improved team communication over the week we used it.

Conversations had better structure, team members were better kept up-to-date, and we actually had a way to save...results of our conversations for future use.”

- employee of 5-person tech startup
Lost in group chat at work again?

TL;DR: Tilda is a Slack plugin that helps teams tame the chaos of group chat through collaborative tagging and summarization.

INSTALL TILDA

tildachat.com
Tools that give people the power to:

- Summarize large discussions
- Place discussions in the right context
- Configure the delivery of content

Discussion threads
Educational materials
Group chat
Webpages
Harassment
Mailing Lists

CSCW '17
L@S '17
CSCW '16
CSCW '18
CHI '18
CHI '15
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Reading 4: Safety

This is a snapshot of When2Meet, one of the various web apps currently available for scheduling meeting times. The meeting coordinator is scheduling a weekly meeting, and has asked group members to enter their availability.

The interface for entering availability is distinct from (not externally consistent with) the typical interface for this task, which often has checkboxes or radio buttons for non-overlapping time slots of a fixed length. As a usability test, try entering your weekly availability into our aux class meeting.

How did you learn how to use it?

- Did you read the directions under the legend?
- Did your cursor change as you moved over clickable areas? (A perceived affordance)
- Did you just click around until something happened and learn a conceptual model based on the site's immediate feedback?
- How did you figure out how to undo a mistake?

The interface is simple, and can be quickly learned. It starts as a wholly unavailable block, and the user can click and drag to swap out periods of availability. And yet, it's not safe.

Half the members of the group entered the inverse of their availability into the site, tripping the scheduling process to start over.
Biology

Biology is the scientific study of life. Studying biology is an opportunity to ask exciting questions about the world that surrounds us. It is an opportunity to dig into some of humanity’s deepest questions about our origins, our planet’s history, and our connections to other living beings (big and small/distant or extinct). It is also an opportunity to dive into a world of practical problem solving and to think hard about possible solutions for improving health care, maintaining sustainable food supplies, and producing renewable energy technologies.

Studying biology helps us understand issues and address everyday problems. For instance, you can better understand how what you eat and the amount you exercise influence your health when you understand the biochemical reactions that describe how the food (matter) is transformed, how it and your body store energy, and how this energy can be transferred from the food to your muscles. Deciding whether or not to buy products labeled with terms like “antimicrobial” or “probiotic” can be easier if you understand what the microbes, which live in, on, and around us, do. Understanding the biochemical principles that describe the changes that happen to eggs as they cook can help you understand how similar physical processes may be central to the cellular stress response and some diseases. Your eye color can be better appreciated with an understanding of the genetic and biochemical mechanisms that link genetic information to physical traits.

Studying biology even helps us understand things that are “out of this world.” For instance, understanding the requirements for life can help us look for life in places like Mars or deep in Earth’s crust. When we understand how to properly “rewire” cellular decision-making networks, we may finally be able to regenerate functional limbs or organs from someone else’s tissue, or reprogram diseased tissues back to health. There are many exciting opportunities. The key point is that mastering a few basic principles helps you understand and think more deeply about a wide array of topics. Keep this notion in mind throughout the course.

One thing that I really like about studying biology is the fact that there are so many different branches of it, but that they are all related to each other. I am particularly interested in the physiology aspect of biology, but biology is such a general term and there are so many different pathways and so much information that one can learn while studying biology, which is pretty amazing. Things are always constantly changing and people are always researching new things so there is always endless content to be studying if interested.

I agree with you in the fact that there are many aspects to study about biology. I am just fascinated with the point that even the tiniest things/details that seem unimportant intertwine in various aspects. I find it quite interesting how biology can be viewed...
Students add **emoji annotations** to their comments in the margins.

- Over **150,000** comments with emojis
- By over **6,000** students

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Learning from Richer Data

Distinguishing confusion versus curiosity in untagged comments

Can we predict what section of a textbook is likely to be confusing?

Readers see heatmap of emotions over text

Teachers can tailor their teaching.
Annotating Code

Why did you implement the code this way?

Added the conversation to the code repository!

Link discussions about code back to the code itself for future readers

Comments added near relevant source codes for future reference

@Clerkbot
https://github.repo#L10
“To engine facilitate…”

Eyebrowse: annotate the web

Discussions are tied to where they took place

Tell the system which domains are “public” spaces versus “private” spaces

In public spaces, you can bump into friends, leave notes, see where crowds are.

Tools that give people the power to...

Summarize large discussions
Discussion threads

Place discussions in the right context
Educational materials

Configure the delivery of content
Harassment

Group chat
Webpages

Mailing Lists
Mailing Lists: 40 years old, still the same!

Flexible sender and receiver configurations

tagging, up-voting, subscribing, following, blocking

all from your client!


murmur.csail.mit.edu
Program your Inbox!

A general domain specific language and UI for expressing email automation?

Tools that give people the power to...

- Summarize large discussions (CSCW '17, Discussion threads)
- Place discussions in the right context (CSCW '18, Educational materials)
- Configure the delivery of content (LeS '17, Webpages)

Left:
- Group chat (CSCW '16)
- Mailing Lists (CHI '18, Harassment)

Right:
- CHI '15, CHI '18
1) People get harassed in very different ways, have really different ideas about what is harassment, and different ideas about how they want to deal with it.

2) The most effective strategy (after deleting one’s account) was to give a password to a friend and have that friend go in and clean up their inbox.
"My best friend... he has the passwords to all of my social media accounts. I basically was like, 'Please log in to my Twitter account. Please block everyone who has just messaged me anything disturbing. Just go in and figure it out.'"
Friend-sourced moderation
**Owners**

- I feel guilty asking my moderator for help with this kind of task.  
  - Pre: 3.4  
  - Post: 3.8

- I am nervous about my moderator seeing my private information.  
  - Pre: 2.0  
  - Post: 1.2

- My moderator will be/ was able to accurately interpret my needs.  
  - Pre: 4.2  
  - Post: 4.8

**Moderators**

- I will be/ was able to get emails to the owner in a timely manner.  
  - Pre: 3.2  
  - Post: 2.7

- I am nervous about seeing some private information about the owner.  
  - Pre: 2.8  
  - Post: 2.0

- I am confident I will be/ was able to interpret the owner’s needs.  
  - Pre: 4.6  
  - Post: 4.0
Owners

I feel guilty asking my moderator for help with this kind of task.  
Avg: 3.4  
Pre: 3.8  
Post: 2.0

I am nervous about my moderator seeing my private information.  
Avg: 1.2  
Pre: 1.2  
Post: 2.0

My moderator will be/ was able to accurately interpret my needs.  
Avg: 4.2  
Pre: 4.8  
Post: 4.2

Moderators

I will be/ was able to get emails to the owner in a timely manner.  
Avg: 3.2  
Pre: 2.7  
Post: 2.8

I am nervous about seeing some private information about the owner.  
Avg: 2.0  
Pre: 2.0  
Post: 2.0

I am confident I will be/ was able to interpret the owner’s needs.  
Avg: 4.6  
Pre: 4.0  
Post: 4.0

Legend:
- Blue: Strongly Agree
- Green: Somewhat Agree
- Yellow: Neutral
- Orange: Somewhat Disagree
- Red: Strongly Disagree
### Owners

- **I feel guilty asking my moderator for help with this kind of task.**
  - **Pre:** 3.4
  - **Post:** 2.0
  - **Strongly Agree:**
  - **Somewhat Agree:**
  - **Neutral:**
  - **Disagree:**
  - **Strongly Disagree:**

- **I am nervous about my moderator seeing my private information.**
  - **Pre:** 3.8
  - **Post:** 1.2
  - **Strongly Agree:**
  - **Somewhat Agree:**
  - **Neutral:**
  - **Disagree:**
  - **Strongly Disagree:**

- **My moderator will be/ was able to accurately interpret my needs.**
  - **Pre:** 4.2
  - **Post:** 4.8
  - **Strongly Agree:**
  - **Somewhat Agree:**
  - **Neutral:**
  - **Disagree:**
  - **Strongly Disagree:**

### Moderators

- **I will be/ was able to get emails to the owner in a timely manner.**
  - **Pre:** 3.2
  - **Post:** 2.7
  - **Strongly Agree:**
  - **Somewhat Agree:**
  - **Neutral:**
  - **Disagree:**
  - **Strongly Disagree:**

- **I am nervous about seeing some private information about the owner.**
  - **Pre:** 2.8
  - **Post:** 2.0
  - **Strongly Agree:**
  - **Somewhat Agree:**
  - **Neutral:**
  - **Disagree:**
  - **Strongly Disagree:**

- **I am confident I will be/ was able to interpret the owner’s needs.**
  - **Pre:** 4.6
  - **Post:** 4.0
  - **Strongly Agree:**
  - **Somewhat Agree:**
  - **Neutral:**
  - **Disagree:**
  - **Strongly Disagree:**
Owners

- I feel guilty asking my moderator for help with this kind of task.
  - Pre: 3.4, Post: 3.8
  - Strongly Agree: 3.1, Somewhat Agree: 0.3, Neutral: 0.05

- I am nervous about my moderator seeing my private information.
  - Pre: 2.0, Post: 1.2
  - Strongly Agree: 0.7, Somewhat Agree: 0.5, Neutral: 0.5

- My moderator will/be able to accurately interpret my needs.
  - Pre: 4.2, Post: 4.8
  - Strongly Agree: 4.0, Somewhat Agree: 0.8, Neutral: 0.1

Moderators

- I will/be able to get emails to the owner in a timely manner.
  - Pre: 3.2, Post: 2.7
  - Strongly Agree: 3.0, Somewhat Agree: 0.3, Neutral: 0.05

- I am nervous about seeing some private information about the owner.
  - Pre: 2.8, Post: 2.0
  - Strongly Agree: 2.7, Somewhat Agree: 0.3, Neutral: 0.5

- I am confident I will/be able to interpret the owner's needs.
  - Pre: 4.6, Post: 4.0
  - Strongly Agree: 4.0, Somewhat Agree: 0.6, Neutral: 0.2
"If I could help in any way, shape, or form, I would do that, no question...

It's really difficult to watch someone that you care about so much go through this, and to be by-and-large helpless...

To have a tool at my disposal that would help in even the smallest way, I would leap at a chance to do that."
Owners

- I feel guilty asking my moderator for help with this kind of task.
  - Pre: 3.4
  - Post: 3.8
- I am nervous about my moderator seeing my private information.
  - Pre: 2.0
  - Post: 1.2
- My moderator will be/ was able to accurately interpret my needs.
  - Pre: 4.2
  - Post: 4.8

Moderators

- I will be/was able to get emails to the owner in a timely manner.
  - Pre: 3.2
  - Post: 2.7
- I am nervous about seeing some private information about the owner.
  - Pre: 2.8
  - Post: 2.0
- I am confident I will be/was able to interpret the owner's needs.
  - Pre: 4.6
  - Post: 4.0
Re-imagining new structures of discussion systems to give users the power to be able to...

- Summarize large discussions
- Place discussions in the right context
- Configure the delivery of content
What about algorithms?
Looking forward...

Governance of social spaces online using human and AI collaboration
Looking forward...

Typology of discussion system structures?

Better search, summarization, navigation of discussions online

Coarse Discourse: A Dataset for Understanding Online Discussions
Tuesday, May 16, 2017

Every day, participants of online communities form and share their opinions, experiences, advice and social support, most of which is expressed freely and without much constraint. These online discussions are often a key resource of information for many important topics, such as parenting, fitness, travel and more. However, these discussions also are intertwined with a cluster of disagreements, humor, flame wars and trolling, requiring readers to filter the content before getting the information they are looking for. And while the field of Information Retrieval actively explores ways to allow users to more efficiently find, evaluate and consume this content, there is a lack of shared datasets on forum discussions to aid in understanding these discussions a bit better.

Looking forward...

Broadening to audio, video, in-person conversation in small meetings and at scale
Looking forward...

Improving the **quality** of discourse for participants
A positive vision for the future of online discourse?
My Other Interests

Human-Centered Machine Learning
ACM TiiS '18

Conference Recommendation and Meetups
CSCW '16

End User Interactive Data-Driven Web Publishing
UIST '14, UIST '16

Social Media Analysis and Politics
CHI '15, CHI '16

Framing in Political News
C+J '14, ICWSM '14

Social Media Analysis and Urban Computing
SocialCom '13, ICWSM '12
Thank you to my collaborators, students, and mentors!

Haystack Group at MIT CSAIL

Masters students @ MIT/Harvard

Undergraduate students at MIT+

Other Academics

Industry Research

Public Interest/Non-profit

Logos: Berkman Klein Center, CSAIL, Google AI, Microsoft Research, Credibility Coalition, Hacks/Hackers, Meedan, W3C, Wikimedia Foundation, Online SOS
Re-imagining discussion systems to give users the power to be able to...

- Summarize large discussions
  - wikum.org
  - tildachat.com

- Place discussions in the right context
  - nb.mit.edu
  - eyebrowse.csail.mit.edu

- Configure the delivery of content
  - murmur.csail.mit.edu
  - squadbox.org

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