

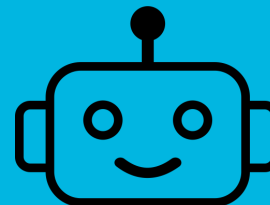
“Wait, What Are You Guys Talking About?”: **Presenting ConvoBuddy**

Facilitating Bids for Entry into
Conversational Groups using A
Chatbot Conversation
Assistant

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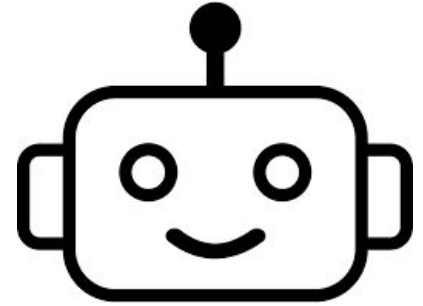
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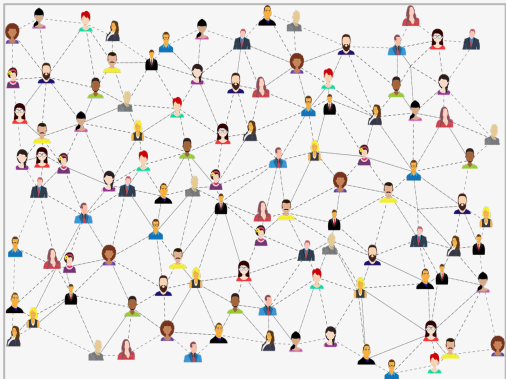
What is ConvoBuddy?

ConvoBuddy is a tool intended to help people join ongoing conversational groups.



Introduction

Motivation



Equitable Network Building

It is estimated that 80% of **job opportunities** are not advertised (Source: WorkBC). Professional and social networking opportunities are crucial for **career advancement** and life outcomes.



Cultivating Inclusive Environments

ConvoBuddy aims to help individuals identify and **join conversations** they might typically shy away from. ConvoBuddy allows conversations to evolve based and organic relationships to form based on **similar interests** and conversation content.



Addressing Social Anxieties and Difficulties

Individuals who struggle with **social anxiety** and social cues may find it hard to circulate gracefully in traditional networking settings. We aim to **minimize these fears** by providing clear cues and visualizations to help users navigate potentially intimidating settings.

Project

Component S

Implemented as a **mobile-friendly web application** for real-time interaction and visualization using a micro-service architecture framework.

Motivated by the desire to create a tool that requires no external hardware or software installation, ensuring **ease of access for users**

Literature **Review**

Need-finding **survey**

Conversational Group **Detection**

Group **visualization**

Speech recognition and **transcription**

Conversational topic **summary**

Conversational **tips**

Timing **cues**

Project

Component

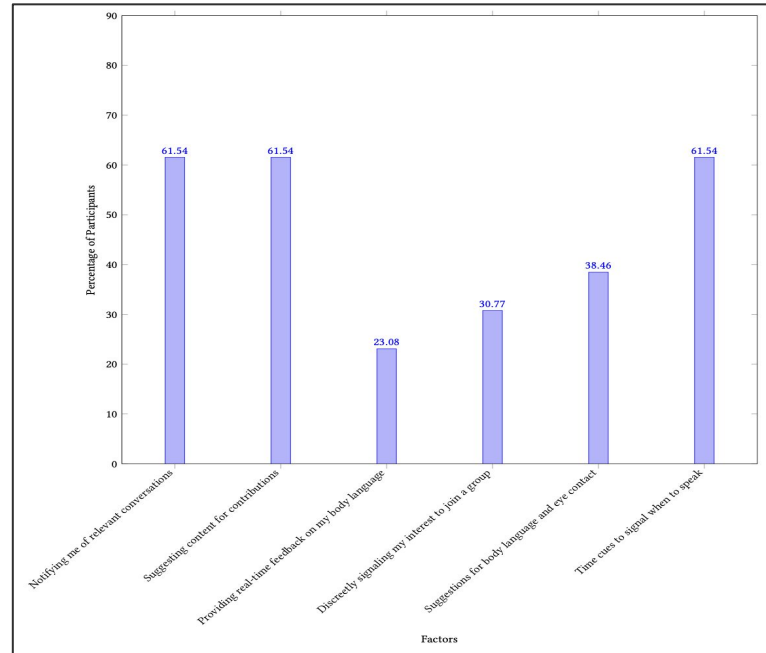
Previous work in this area focuses on social skill development, but **there is a gap** when it comes to the act of **joining a conversation**.

A brief need-finding survey revealed potential users may desire:

- Being **made aware** of relevant conversations
- **Suggesting content** to contribute to conversation
- **Time cues** to signal when to speak
- Knowing **ahead of time** what the group is talking about before joining

Literature **Review**

Need-finding **survey**



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Conversational **group detection**

Group **visualization**

Inspired by the concept of **f-formations** in sociological proxemics literature, we envisioned **mapping the social space** of free-standing groups events



Convo Buddy

Conversation Map



Find conversations that you want to join!

Stuck? The transcripts are a great place to start!

1 0

2 0

The conversation discusses the ethical, legal, and societal implications of AI technology.

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Speech recognition and **transcription**

Conversational topic **summary**

Transcripts



See what the conversation is all about!

The conversation discusses the ethical, legal, and societal implications of AI technology.

Debate over the benefits and preferences of oranges versus apples as fruits.

Transcript

I think oranges are better than apples.
They're...Apples are more versatile though. You can eat t...But oranges give you that instant burst of hydr...Apples have fiber, which helps with digestion. ...True, but peeling an orange is half the fun! An...Apples are more convenient though—no peeling re...Oranges have such a



Transcripts



See what the conversation is all about!

The conversation discusses the ethical, legal, and societal implications of AI technology.

Debate over the benefits and preferences of oranges versus apples as fruits.



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Conversational **tips**

Timing **cues**

Starting **new conversational floors** in an ongoing conversation are typically done via one of **four main strategies**:

1. Schism-Inducing Turn
2. Toss-out
3. Aside
4. Retro-Sequence

(Aoki et. al. 2006)

When **silence** is detected > 2 seconds, the screen **will flash** to visually nudge the user to begin speaking



User Scenario

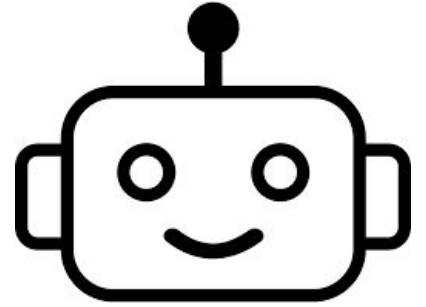
A user attends a networking event where there is limited pre-existing social context. The participants of the event all use this ConvoBuddy to help facilitate networking. We assume that all participants have ConvoBuddy open on their microphone-equipped mobile devices. Each user is represented as a point on the map, with orientation denoted with an arrow. Each conversational group is denoted with a unique shared color. Upon finding an interesting group discussion, the user opens the conversation tab to reveal a truncated transcript of the ongoing conversation, as well as some tips for joining. Now the user just needs to make their approach and take their turn.

Conclusion

Future Work

- More **precise timing** cues
- More nudging behavior to **encourage users** to act
- More **personalized** recommendations
- More **precise sensing** and mapping
- More **accurate** transcriptions and **faster** processing times

Thank you



Appendix

Sources

1. Paul M. Aoki, Margaret H. Szymanski, Luke Plurkowski, James D. Thornton, Allison Woodruff, and Weilie Yi. 2006. Where's the "party" in "multi-party"? analyzing the structure of small-group sociable talk. In Proceedings of the 2006 20th anniversary conference on Computer supported cooperative work (CSCW '06). Association for Computing Machinery, New York, NY, USA, 393–402.
<https://doi.org/10.1145/1180875.1180934>
 2. <https://www.workbc.ca/search-and-prepare-job/job-application-tips/networking>
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