

What is the team's vision for your socialbot? (500 words)

"Good morning, Jeff. You have 5 events on your calendar for today."

"The Seahawks' Russell Wilson has been cleared to play against the Kansas City Chiefs Sunday."

"Governor Inslee's Education Bill passed yesterday."

"You'll need your umbrella, it's going to rain today after 5 PM!"

"It means 'turtle' in Japanese."

"Your Amazon Fire HD 8 Tablet has been ordered and will be here on Tuesday by 8 PM!"

"Now playing 'Imagine' by John Lennon from Prime Music."

From morning to evening Alexa tends to your needs. From waking you up to updating you on your fields of interest to tucking you in with your favorite comfort music, Alexa seems to cover it all. But imagine you didn't just want to know about the most recent discovery in Quantum Physics, you wanted to understand what researchers in the field are currently working on, what they are thinking, estimating, predicting. Sure, you could Google it or read something on Wikipedia, but that's no fun. You could talk to a friend about it, but chances are your friend knows no more than you about Quantum Physics. So you're in a bind; that's where Cornell Neural Team 6 comes in.

User: *Alexa, what's going on in the world of Quantum Physics?*

Socialbot6: *These days, grants in quantum physics go to researching applications much more than to researching pure physics.*

We are a team of seven Cornell students pushing the envelope in conversational AI. Building on existing deep learning techniques, our system will understand users' intentions based on previous interactions, presenting them with a more personal response.

User: *Interesting! Tell me about some applications.*

Socialbot6: *Well there's quantum computation, which is the big one. By harnessing quantum mechanical phenomena such as superposition, we can perform certain operations much more efficiently, and thus increase computing power. What do you think of this application?*

Our Socialbot will be coherent. It will understand aspects of sentence structure such as tense and plurality, while also understanding nuances of conversation such as tone and context. For example, our bot will use past utterances to comprehend ambiguous modifiers like "he", "she" and "it" - to pinpoint exactly what a user means by a given sentence.

User: *Seems cool! Why does it matter?*

Socialbot6: *We can build more sophisticated algorithms that would allow us to solve currently infeasible problems. This could mean an era of advanced research in many fields, especially Artificial Intelligence.*

Our Socialbot will be engaging. It will draw a user's attention to the interesting parts of a topic they have brought up, and spark their curiosity in certain aspects of a topic they might have not been exposed to previously. It will answer users' questions in a way that doesn't simply cut the conversation off at the answer, but opens further avenues for the user to explore.

User: *Wow, tell me more about this AI revolution.*

Socialbot6: *It all started with Cornell Neural Team 6's submission to the Alexa Challenge competition...*