

JOELLE BRUIN

Joelle Bruin is an artificial intelligence (AI) chatbot that aims to help UCLA students easily navigate and access the university's mental health resources. In its current stage, Joelle Bruin has three main functions. First, Joelle Bruin is capable of directing users to the on-campus mental health resources and student groups that best suit them, based on the users' responses to questions about their needs and preferences. To follow up, Joelle Bruin can respond to specific questions that a student may ask about the details of these mental health resources and student groups. Second, Joelle Bruin can respond to basic statements that the student enters by recommending basic mental health tips. As an example, if a student tells Joelle that "I feel anxious," Joelle can respond with examples of meditation exercises that can help to alleviate symptoms of anxiety. Third, Joelle Bruin can answer questions that students may have about how to contact emergency hotlines or mental health services if they or someone they know is in crisis. It is

important to note, though, that Joelle Bruin cannot be used as a replacement for a human therapist, nor can it be used in place of a crisis hotline.

At the end of the day, the goal of Joelle Bruin is to connect students with the support they need. Joelle Bruin is designed to help address the challenges that many UCLA students face when searching for mental health support at UCLA. UCLA is a large public university with a population of close to 31,000 undergraduate students and a campus size of 419 acres. As a result of the university's size, the mental health resources available to UCLA students are characterized by two key problems: limited resources in comparison to the size of the student body and lack of awareness of existing resources. In terms of the second issue, the mental health services and groups currently available to students are often not well-promoted and are also spread out across campus. As a result, students at UCLA who need mental health support may

not always be able to find the best means of treatment when they most need it.

For instance, a UCLA student struggling with symptoms of depression may not know that due to the sheer number of students seeking CAPS counseling, each new intake student may wait months before being able to see a therapist, and even then, can only schedule three appointments per academic year. This same student may not be aware of other support options such as the STAND program that provides mental health tracking and treatment options offered by the UCLA Depression Grand Challenge or peer support initiatives on campus, such as the GRIT program that trains students to provide support and wellbeing coaching. Joelle Bruin seeks to address the lack of awareness about UCLA's mental health resources and to that end, bridge the divide between students and the support that they need.

FAST FACTS:

- There are over 100 different clubs and resources collected on Joelle Bruin.
- The initial pilot includes 70+ users.
- The retention rate (the percentage of users who returned to Joelle Bruin on a monthly basis over the trial period) during the pilot was 72 percent.



Joelle Bruin

**CAT WANG**
joellebruin.com

**IN COLLEGE,
ADDRESSING
MENTAL HEALTH IS
MUCH MORE THAN
SHARING MEMES
ABOUT FEELING
'STRESSY AND
DEPRESS-Y.' JUST AS
MENTAL HEALTH
IS MULTIFACETED,
SUPPORT FOR
MENTAL HEALTH
SHOULD BE AS WELL.**

GETTING STARTED

Joelle Bruin got started thanks to a dedicated team of creatives. At first, Joelle Bruin was a passion project that I worked on individually. In addition to researching platforms for hosting chatbots, I began drafting out the framework of how interactions with Joelle Bruin would run — for instance, what would be key terms in the user's input that are essential for the chatbot to recognize? I also began to compile information about UCLA's mental health support resources, from counseling options to student-led wellness clubs. As someone with limited coding experience, I knew that in order to fully realize Joelle Bruin, I would need to find qualified developers to join me. It just so happened that during this time, I was working on another mental health project in collaboration with fellow students from Creative Labs UCLA, a creative community that connects designers, managers, and developers to create projects that address issues in the UCLA community or in the wider Los Angeles community. Our resulting project from Creative Labs, called Glia, is a basic mental health journal that students can use to keep track of their daily moods. Thanks to the expansive Creative Labs network of developers and designers who expressed interest in Glia, I was able to form a team of highly capable individuals who were also dedicated to the cause of making mental health resources at UCLA easier to access. We began to develop Joelle Bruin and briefly tested out the chatbot during the 2018-19 academic year. Subsequently, Joelle Bruin was recognized by the UCLA student government as a growing resource for UCLA students. Although we are not formally registered as a club, owing to the fact that we have a very small team and do not need large spaces on campus to congregate, Joelle Bruin is in the process of pursuing potential funding support in order to further expand the chatbot's capacities based on the feedback we have received during Joelle Bruin's initial run. Naturally, there are some issues that cannot easily be resolved due to the current constraints on chatbot technology, but for the most part, we received suggestions that could inform tangible improvements to Joelle Bruin's operations. For instance, while we received feedback that Joelle Bruin is not capable of construing the meanings of long sentences, this is a shortcoming that cannot easily be addressed because of the way that the AI chatbot scans through sentences in order to parse them. However, we received another

piece of feedback that Joelle Bruin was not capable of recognizing several common emoji inputs that express emotions (such as the "big grin" face to convey excitement or joy), which we have begun to integrate. We continue to use feedback gathered by the users who tested Joelle Bruin to improve.

POTENTIAL BARRIERS

To implement a chatbot similar to Joelle Bruin, the three main issues that students might face are the chatbot's practicality, administrative resistance, and technical issues. In terms of practicality, I would advise students to be aware that there are significant limits on what artificial intelligence can do, and that these limits might require to scale down one's vision for an ideal chatbot. Despite its name, artificial intelligence isn't necessarily always intelligent in conversation — for an example, look no further than Siri, Alexa, or any automated customer service chat. It's important to remember that in the process of bringing one's idea for a chatbot to reality, forgoing certain elements of the initial design does not mean that the final product will be useless. Therefore, don't be afraid of compromising your initial chatbot goal and instead focus on aligning your vision with the technological tools available in order to create the best chatbot possible.

When it comes to introducing a mental health-related chatbot to any administrative body, it is important to remember that universities tend to be very wary of groups or services that may create a liability risk for the institution at large. As we pitched Joelle Bruin, we had to explain Joelle Bruin is neither capable of nor designed to replace human medical professionals, and integrated this important point into our chatbot's design: When a user opens Joelle Bruin for the first time, Joelle "says" that it cannot be used in place of counselors or emergency services. I would guess that a lot of the administrative pushback stemmed from a lack of understanding about the nature of artificial intelligence chatbots, which can only be used to mimic human interaction, not to replace it. Students implementing a mental health-related chatbot would need to be able to clearly express the nature of the technology as well as the necessary disclaimers for users. Finally, for any chatbot, technical issues can arise easily and impact the way that the chatbot functions. There are bound to be glitches, and

each upgrade of the chatbot may unexpectedly reveal problems that were not previously evident. I would advise students interested in implementing a chatbot program to be aware of how it will likely not work. For students with no coding experience, to get started on a chatbot, I would suggest looking at chatbot tutorials online and seeing what solution suits best. Additionally, for a very simple chatbot, there is a wide variety of no-code-required platforms that easily integrate into Facebook Messenger. Of course, the process may be time-consuming, but ultimately, it can be very rewarding!

