



WEBSITE: [HTTPS://X2.AI](https://x2.ai)
EMAIL: [HELLO@X2AI.COM](mailto:hello@x2ai.com)
PHONE: +1 (415) 964 6874

AFFORDABLE, ON-DEMAND, AND QUALITY

MENTAL HEALTHCARE FOR EVERYONE

USING PSYCHOLOGICAL ARTIFICIAL INTELLIGENCE



Michiel Rauws

Co-Founder and
Chief Executive Officer
Email: michiel@x2.ai
Phone: +1 415 964 6874



Eugene Bann

Co-Founder, President and
Chief Technology Officer
Email: e@x2.ai
Phone: +1 415 706 2850

X2AI is a Singularity University company that builds and deploys psychological autonomous intelligent assistants (AIA) to connect the patient with their therapist 24/7, for use within behavioral health services. **Tess™**, X2AI's flagship AIA, holds conversations with the patient, administering mental health coping mechanisms, encouraging emotional wellbeing, and providing mental health education through a variety of existing technology-based communications, including SMS, popular instant messaging apps, and web browsers.

Health Care Gaps: many patients don't have access to timely, quality mental healthcare services when they need it, and for many, the cost of accessing such care is prohibitive. In the United States, many mental healthcare professionals have limited capacity in treating patients, and insurance coverage limitations may prevent the patient from accessing additional services due to cost. In developing and crisis-stricken countries, mental healthcare services are practically nonexistent.

Tess bridges the gaps in mental healthcare using a **patient-centric** approach. She is **just a text message away**, instantly and remotely available on a **24/7 basis**, when and where the mental healthcare provider isn't. Tess **monitors the patient** and **learns their emotional signals** during conversations, and based on certain triggers, autonomously communicates this to the therapist who is then able to **intervene or escalate treatment**. With therapist oversight, Tess delivers **therapy education, health-related reminders** and **mental health coping mechanisms** that are personalized for each patient and patient's culture. Access to Tess is based on the patient's needs between scheduled appointments and at a **lower cost than regular therapy sessions**. The ability to **scale** Tess across a large patient base further reduces costs for healthcare providers, payors and patients.



Our **revolutionary** Smart Autonomous Intervention (SAI) technology allows mental health professionals to go from treating five patients a day to **caring for fifty patients a day**.

X2AI's emotion algorithm and extensive emotion ontology is best-in-class. Unlike current solutions, which focus on sentiment or a limited set of generic emotion categories, X2AI has developed highly granular emotion ontology, built using years of continued proprietary research. By personalizing this technology for each patient, this allows Tess to understand the intricate nuances and morals of patient thoughts, and provides a unique insight into a patient's feelings, mood, and behavior. Moreover, as several psychological processes influence people's willingness to take medication, adopt new behavior, and determine whether or not they stick to their regiment, X2AI extended this emotion ontology to cover medical categories.

X2AI's intricate conversation algorithm ensures *actual* conversations are held. Unlike the majority of current chatbots, who are trained on "big data" and only make it appear as if a conversation is taking place, Tess is a carefully constructed *stateful* AI. This means that, not only do all prior patient and Tess responses and user states get taken into consideration when evaluating the current state to determine what to say next, Tess can also help patients who trigger certain thresholds for specific parameters over time, such as patients with bipolar disorder and forms of PTSD.

Over time, Tess learns what the patient loves, and why; what scares them, what calms them down, and even what to say to the patient that will best help them cope through a period of depression, forming an **emotional bond**. Being able to create and maintain an emotional bond is key; it lowers friction and increases willingness to talk. From a business perspective, this lowers churn rate. This emotional investment is a much more attracting force than any financial investment.

