



LUCID INNOVATION HIGHLIGHT



LUCID

COMPANY OVERVIEW

LUCID is driving innovation at the crossroads of mental health, machine learning (ML), and music. Using cloud-based access, LUCID is developing experiences to help people better manage anxiety and stress. Through innovative human-centered design coupled with art, science, and technology, they have developed wellness-focused experiences that deliver measurable benefits in as little as 5 minutes.

LOCATION: TORONTO, ON

TECHNOLOGY



Internet of Things

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ADDRESSING MENTAL HEALTH CONCERNS

With the discussion on mental health becoming more open, it's clear that solutions addressing these issues can be enhanced. Therapy is a common company tool to help employees deal with these problems, but it's often expensive and difficult to find availability. A common alternative is music therapy, although it's hard to customize the user's experience appropriately without the proper technology.

BIO-BASED MUSIC THERAPY

LUCID's mission is to help individuals take control of their mental wellness by creating tools attuned to their specific physiological needs. With this in mind, LUCID developed a cloud platform that uses their machine learning pipeline (MLP) to collect biometric feedback on how certain music effects its users. LUCID MLP receives data from psychometric self assessments and biometrics, and varies the tempo, cadence, and various other musical features the user is listening to, in order to suit their mental wellness needs.

VERIFYING ABOVE AND BEYOND SCALABILITY

With CENG N's expert guidance and infrastructure testbed, LUCID conducted a project to monitor and better understand the performance of their platform. As a result, they identified the resource requirements needed to scale to 7 million mobile users. Load test tools also allowed them to optimize their scalability, decreasing their ML prediction time by 52%. With this validation, LUCID is now ready to scale their platform and confidently serve a larger client base.

"ML Ops is a very new field, and the ability to successfully launch our novel machine learning architectures in a cloud environment and perform scale testing is a certainly unique and competitive experience for a firm like ours."

Aaron Labbe

Chief Technology Officer

LUCID

