



manas

Every Mind deserves Care, because silence should never be a sentence

CTO Program Group 2 presents innovative AI-driven mental health support solutions



Who Are We.....

Team manas



Blair Day

SVP Engineering & IT

Enterprise IT Operations



Sunita Gogineni

VP & Head of IT

IT Strategy, Transformation &
Digital Innovation



Kinshuk Dutta

*Director, AI Product
Management*

DATA, AI & Cybersecurity



Kyle Downey

VP, Engineering

Product Engineering



Daniel Gumucio

Founder & CEO

Enterprise Software &
Services

Our team combines deep expertise in AI, cybersecurity, mental health, and enterprise IT—with a proven track record of building scalable, ethical tech. We're not just passionate—we're uniquely positioned to drive real-world impact with Manas

We are Rooted in Purpose, Guided by Vision

Our Team & Purpose

We are Manas → A team driven by the belief that mental health is a human right. Inspired by the Sanskrit word for “mind” or “inner consciousness”



Daniel
Gumucio



Blair
Day



Sunita
Gogineni



Kyle Downey



Kinshuk Dutta

Our Vision

Our vision is to create a world where no sign of mental distress goes unnoticed and no person feels invisible in their struggle. We envision an AI companion that detects early signals of distress, breaks cultural silences, and ensures no one walks alone on their journey to well-being

Our Mission

- Our mission is to safeguard every mind
by creating a compassionate, proactive AI companion
that recognizes distress before it becomes a crisis & gently guides individuals
toward, care, resilience, and healthier lifestyles
ensuring no one walks alone on their journey to well-being

Motto

No cry for help goes unnoticed

Slogan

Every Mind deserves Care, because silence should never be a sentence

Where Have We Been

Our Origin

Exploration Phase

Multiple complex societal problems considered: food waste, educational disparity, insurance bias, and mental health challenges.



Research Findings

Discovered overwhelming pervasiveness and societal impact of mental illness across all ages was impossible to ignore.

Personal Connection

Mental health resonated strongly with everyone - each team member has struggled with or been impacted by mental illness.

Team Commitment

Committed to identifying solvable problems within mental health and delivering meaningful, measurable impact for communities worldwide.

Story

Personal Connection

1 Story: She was a bright young law student, driven, disciplined, admired. But beneath the surface, the relentless buildup of stress had quietly shifted into anxiety, then depression. One day, she locked herself in her room — her family assumed it was another episode, like before. But this time, she never came out.

Her story is heartbreaking and tragic, it's not an isolated one. Students, professionals, and loved ones struggles everywhere live with unseen struggles that quietly escalate **With Manas, our mission is to detect and recognize early patterns of stress and anxiety so that support can reach people before silence turns into crisis.*

Societal & Historical Context

Mental health has become one of the most urgent yet under-recognized crises of our time....

1 in 8

People Affected

50%

Symptoms Begin Age 14

75%

Symptoms Begin Age 24

2nd Leading

Cause of Death

Youth Impact

Mental health conditions predominantly begin during childhood & early adulthood which are critical intervention windows.

- Early onset patterns require immediate attention and care.
- Half of all cases begin by age fourteen.
- Three quarters manifest symptoms by age twenty-four.

Crisis Reality

Many silently battle mental health conditions with preventable tragic outcomes.

- Suicide is second leading cause of death ages 15-29.
- Over half go untreated in developed countries.
- Nearly 90% untreated in low-resource regions.

Urgent Action

Lives are waiting for a path to early intervention and proactive care.

- Proactive detection saves lives before crisis strikes.
- Early intervention can prevent tragic outcomes effectively.

Historical Reference & Stats with Timeline

The background is a deep blue gradient. It features a network of faint, light blue hexagonal outlines scattered across the surface. A white line graph, resembling a heartbeat or a fluctuating data series, is positioned horizontally across the middle. On the right side, there are several glowing, curved trails of light blue particles or data points, creating a sense of motion and depth.

Our Core Values



Hope & Balance

Help is possible, recovery is real and balance across life is within reach.



Empathy & Compassion

Attuned to your mental state, guided by compassion in support of a journey toward well-being.



Safety & Dignity

Where every mind feels safe, free to express, explore, and heal with dignity.

Cascading failures of Mental Health

Recognition Gaps

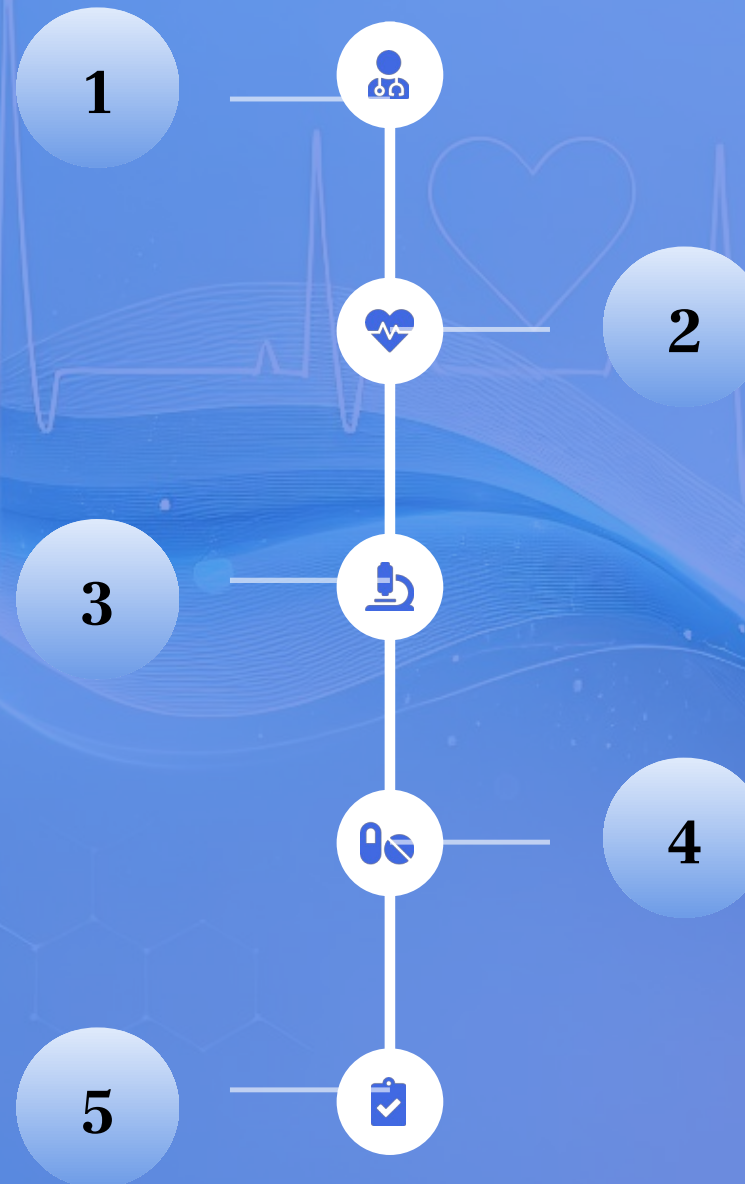
Difficulty identifying early warning signs, with most going undetected until crisis hits

System Failures

Inadequate support infrastructure availability with over half going untreated

Continuity Gaps

Inconsistent long-term care and continuity, causing relapse and making true healing difficult



Cultural Silence

Stigma, and denial prevent open discussion, isolating individuals and deters them seeking treatment

Access Barriers

Limited resources and geographic constraints make mental health care inaccessible for many



Where We Are Headed...

Guiding Minds Forward



AI-Powered Companion

We envision Manas as an always-on ally that proactively detects early signs of distress via multimodal signals including speech, text, image, behavior, and contextual analysis - Operates with federated learning + privacy-by-design, ensuring data trust



Global Accessibility

Mental well-being knows no borders, flow freely across every culture, community, and circumstance.



Cultural Adaptation

Nudges users gently with culturally sensitive, personalized interventions.



Lifelong Sustainability

Bridges continuity gaps by offering ongoing, adaptive support across all life stages and circumstances.

Impact → Care Before Crisis

Prevention

Awareness

Acceptance

Detection

Safer Future

Individual

Society

Family

Community

Lives saved → Suicide prevention through early intervention.

Safer environments → Reduced school and workplace tragedies.

Stronger families & communities → Less stigma, more resilience.

Healthier societies → Lower healthcare costs, higher productivity.

The Impact We Target

6-12

Months Sooner Detection

Early Detection

Identify risks 6–12 months sooner than current practices through proactive AI monitoring and analysis.

- Advanced multimodal signal detection capabilities.
- Predictive analytics for early intervention opportunities.
- Continuous monitoring prevents crisis escalation effectively.

30-40%

Improved Rural Access

Access & Engagement

Improve reach in rural and underserved communities by 30–40% while achieving 2x user retention.

- Mobile-first design for geographic accessibility expansion.
- Cultural adaptation ensures sustained user engagement.
- Overcome typical 25–30% app drop-off rates.

2x

User Retention Rate

Continuity & Support

Reduce relapse rates by 25% with ongoing support and adaptive care systems.

- Long-term care provision across all life stages.
- Personalized intervention strategies for sustainable recovery.
- Every metric represents lives lived with dignity and resilience.

25%

Reduced Relapse Rates

The Future We See

A teenager, overwhelmed by exams, doesn't need to say 'I need help' - Manas will notice.

A veteran, silently battling trauma, isn't left invisible — Manas will reach out.

A mother, holding her family while hiding her depression, is gently supported — Manas sees the unseen.

A parent, crushed by a job yet silent in pride, finds quiet strength — Manas stands by.

A social worker rediscovers balance through soft nudges — Manas cares for the carers.



A scientist chasing breakthroughs finds space to pause — Manas fosters resilience.

A neighbor, who hides silent tears, finds comfort — Manas nurtures with care.

A celebrity, radiant in public but silent in pain, is not unseen — Manas brings light.

A politician, under constant pressure, finds quiet balance — Manas steadies the mind.

A family, fractured by silence, finds unity — Manas restores togetherness.

Our Technical Strategy

AI-Centric Architecture

Multi-agent orchestration combining LLMs, domain-specific ML, and rule-based governance with hybrid edge-cloud deployment



Scalable Infrastructure

Composable microservices and containerized deployment



Continuous Learning

Feedback loops and evaluation pipelines



Strategic Advantages

Trust-first AI with future-proof architecture

Privacy-First Design

Federated learning keeps data local

Differential privacy prevents re-identification

On-device AI for sensitive processing

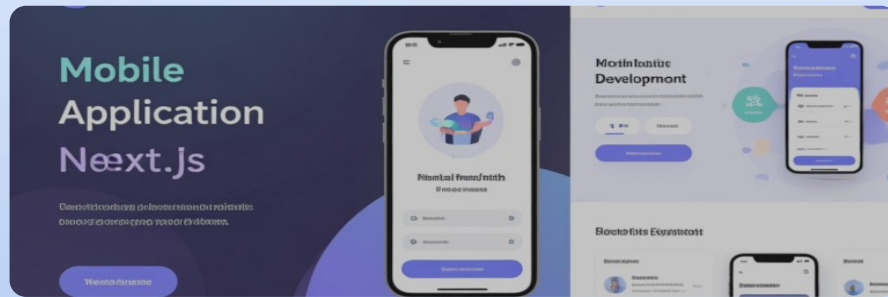
Safety & Governance

Multi-layer moderation and toxicity detection

Explainability built into every action

Immutable audit logs for compliance

Our Preliminary Architecture



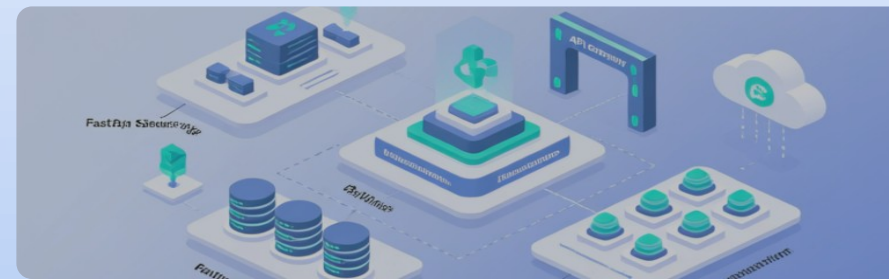
MAANAS (Multimodal AI for Awareness, Neurocognitive Analysis & Support) is the core technology platform powering Manas mental health solution through multimodal architecture

Client Apps

Next.js with TypeScript and Tailwind UI

React Native Expo for mobile

On-device inference with Core ML



The MAANAS platform behind Manas combines LLMs for natural language understanding with domain-specific ML models for emotion and neurocognitive analysis

Backend Services

FastAPI with Pedantic schemas

LangGraph for agent orchestration

PostgreSQL with pgvector storage



MAANAS provides Manas with privacy-foundational design featuring federated learning, on-device inference, and differential privacy ensuring user-controlled data security

AI/ML Stack

PyTorch and Hugging Face

Safety and moderation pipeline

Federated learning with Flower

Our Preliminary Roadmap



Phase 1: Research Foundation

Deep-dive into mental health data and user needs. Partner with clinicians, psychologists, and ethicists. Build ethical AI framework with privacy-by-design.



Phase 2: Prototype Pilot

Foundation setup and MVP private alpha with safety pipeline, basic AI agents, and closed pilot testing for initial validation.



Phase 3: Scale Integrate

Beta release with personalization, on-device inference, federated learning sandbox, and comprehensive evaluation dashboards for broader testing.



Phase 4: Global Expansion

General availability with multi-agent upgrades, explainability, compliance hardening, and full federated learning deployment for worldwide impact.

From Vision to Validation

Pilot Programs & Methodology

Comprehensive validation approach targeting youth, veterans, and frontline populations with rigorous comparison against baseline care and existing mental health applications.

Target Populations

- Youth populations in educational settings and community programs
- Veterans with mental health challenges and transition difficulties
- Frontline workers including healthcare and emergency responders

Key Performance Indicators

- Detection lead-time measured in months earlier than baseline
- Access percentage increase in underserved community adoption
- Engagement retention rates tracked over 6–12 month periods

Methodology Framework

Compare outcomes with baseline care plus existing apps.

Ethics & Privacy

Continuous monitoring aligned with NIST and HIPAA standards.

Continuity Metrics

Reduction in relapse rates with ongoing support systems.

Why MANAS is Different

Alternative Approaches & Limitations

Current mental health solutions face significant limitations in detection, reach, and sustained engagement, leaving critical gaps in proactive care.

- Games & Distractions offer temporary uplift with no real detection capabilities
- Mood Trackers & Journals depend entirely on self-awareness and voluntary disclosure
- Therapy-Only Models have limited reach, high costs, and social stigmatization barriers

The Manas Advantage

Manas delivers proactive, inclusive, private, and scalable mental health support that fundamentally transforms how we approach mental wellness.

- Detects invisibly through multimodal AI without requiring user disclosure
- Supports continuously with always-on companion throughout all life stages
- Adapts across cultures with personalized, culturally sensitive interventions
- Sustains resilience through ongoing adaptive support and prevention strategies
- While others wait for you to act, Manas acts with you and for you.



**EARLY DETECTION
EMPOWERS PREVENTION**



**PREVENTION
NURTURES RESILIENCE**



WELL-BEING FOR EVERY MIND

Every mind matters. Thank you for being part of this mission

Appendix

The background is a deep blue gradient. It features a network of faint, light blue hexagonal outlines scattered across the surface. A white line graph, resembling an ECG or heartbeat, is positioned horizontally across the middle. On the right side, there are several glowing, curved trails of light blue particles or data points, creating a sense of motion and technology.

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Key Concepts & Innovation Areas (Key Words)

Core Concept Keywords

Manas
Sanskrit: Mind, Inner & Consciousness
Mental Health
AI-driven Companion
Early Detection
Crisis Prevention
Resilience
Well-being

Values & Mission Keywords

Hope & Balance
Empathy & Compassion
Safety & Dignity
Every Mind Deserves Care
No cry for help goes unnoticed

Technology Keywords

AI-Centric Architecture
Multi-agent Orchestration
Hybrid Edge–Cloud Deployment
Federated Learning
Differential Privacy
On-device Inference
Safety & Governance
Toxicity Detection
Explainability
Immutable Audit Logs
Continuous Learning
Privacy-by-Design

Logo and Branding



manas



manas

#5c6cb3

#ad6cad

#a8e6cf

#ffb397

#f4f4f7

Colors

Primary Color

- Indigo Blue: #5c6cb3
- Represents trust, calm focus, and reliability.

Secondary Color

- Lavender Purple: #ad6cad
- Represents compassion, creativity, and emotional balance.

Accent 1

- Soft Mint: #a8e6cf
- Adds freshness, growth, and positivity.

Accent 2

- Warm Peach: #ffb397
- Conveys empathy, warmth, and approachability.

Neutral Base

- Cool Gray: #f4f4f7
- Clean background shade to ensure accessibility and readability.

Fonts

Primary Font (Headers): Montserrat

Rounded, modern, and approachable. Conveys friendliness and openness.

Secondary Font (Body & Subtext): Montserrat

Rounded, modern, and approachable. Conveys friendliness and openness.