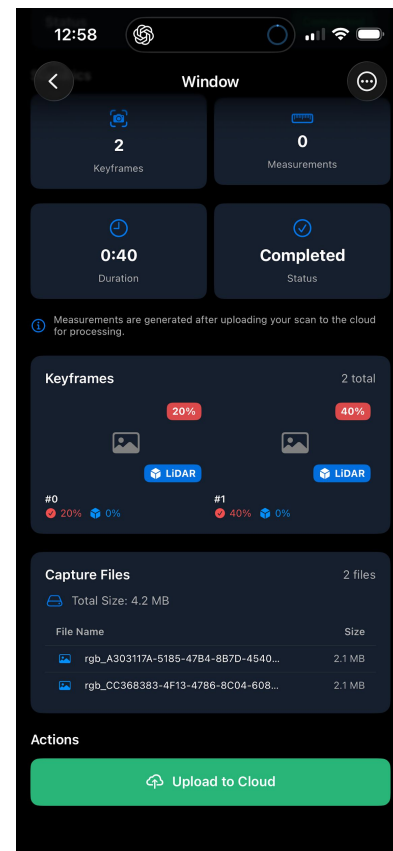
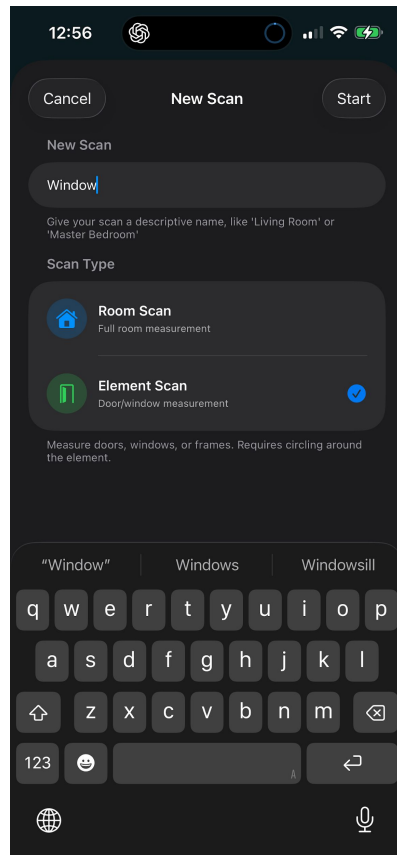
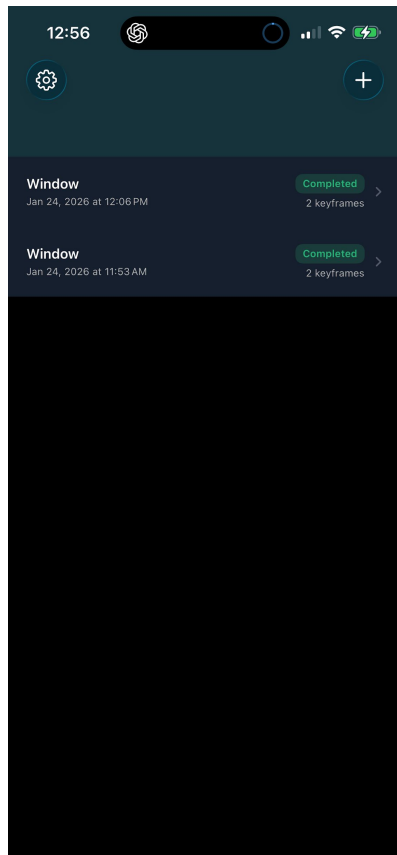


Cline x Cerebas x Z.AI GLM 4.7 and Xcode



Consumer Mobile Metrology for Residential Use Cases

January 2026

My Background

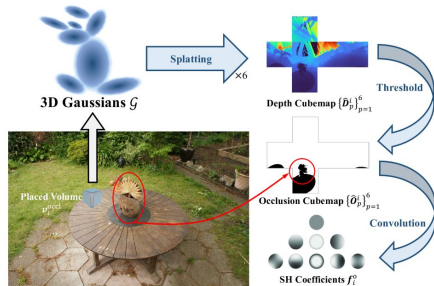
- Solution Architect
- Previous Java Developer
- Currently an AI agent software developer supervisor
- *(almost)* ZERO expertise with iOS Apple programming other than knowing that it is *hard*

What is the Vibe Coding Challenge? (Part 1)

- Sophisticated large language models (LLMs), such as Claude Opus 4.5, struggle to generate applications beyond rudimentary business functionality.
- Metrology, the science of measurement, is a domain requiring a high degree of specialized expertise.
- While LLMs have substantial access to the underlying knowledge, generating a reliable, specification-compliant implementation has not been successful to date.
- This difficulty necessitates either:
 - Human expert intervention to guide both the scientific and programming aspects.
 - Implementing an expert decomposition process to resolve complexities encountered after the initial application scaffolding is complete.

What is the Vibe Coding Challenge? (Part 2)

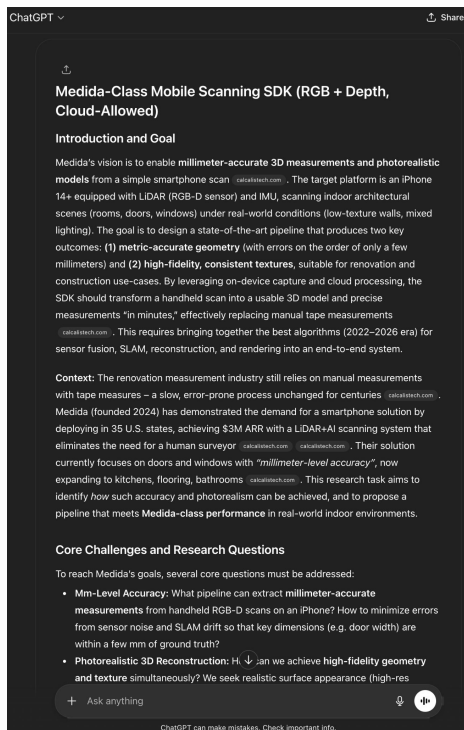
- Mobile Application
 - iPhone 14 Pro target device
 - Xcode on MacOS (Intel)
 - Windsurf with Cline + GLM 4.7 extension
- Cloud Post-Processing (OBE - Overcome By Events)
 - Docker Compose container
 - Create 3D Guassian Splat for visual walkthroughs
 - Create measurements and floorplans for renovations, new appliances, furniture, etc.



Medida provides **1/8" accurate** digitized measurements for window and door installers **100% of the time**. Eliminate mismeasurements, speed up project cycle time, and improve customer satisfaction with our **AI-powered virtual measuring system**.

What is the Vibe Coding Challenge? (Part 2)


Can we ask ChatGPT Deep Research (or whichever deep research you prefer) to create a “PhD-level” analysis of how to implement a metrology solution on a mobile device?



...and have that be *correct* and ready for implementation?




Medida is an Israeli startup focused on the renovation sector, utilizing **AI-powered technology** to provide **millimeter-level accuracy** in measurements using smartphone scans. The company has raised **\$4 million** in seed funding and is targeting profitability by early **2026**. Medida's innovative system aims to eliminate common mismeasurements and speed up project cycle times, significantly improving customer satisfaction in the home renovation industry.




Schedule a Demo


Why generate AI marketing copy when customers can speak for themselves?



Sam Amidon
Sales Manager
Pella Buffalo





Ben Gerstung
President
Feldco





Victor Yanev
President
Champion Windows


Used by over 30 leading window & door remodelers, including:










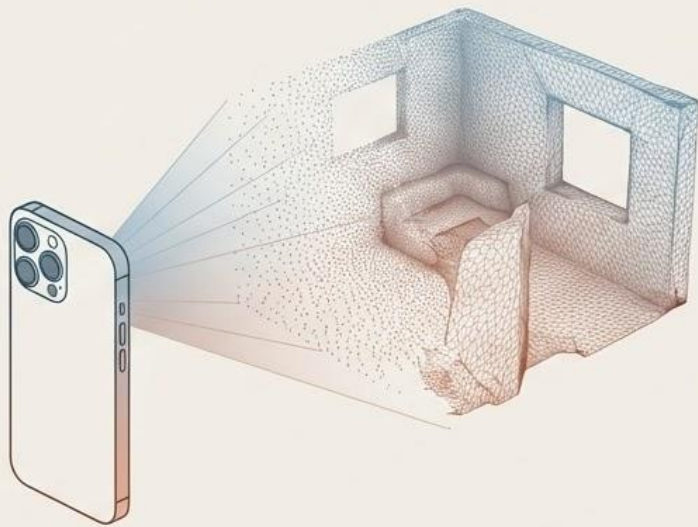


THOMPSON CREEK
WINDOW COMPANY®



Medida-Class Mobile Scanning SDK

Advanced Cloud-Allowed 3D Reconstruction Pipeline

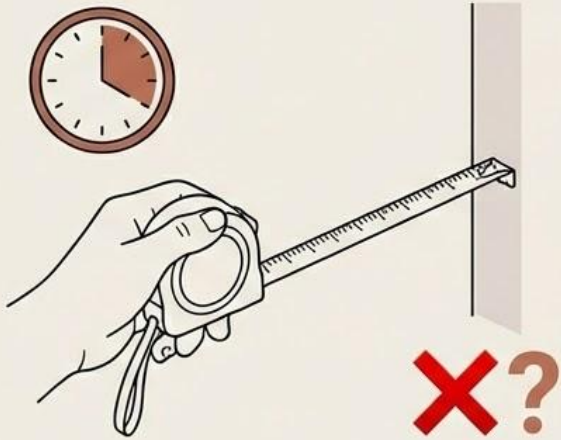


Enables millimeter-accurate measurements and photorealistic models from standard smartphone (iPhone 14+ with LiDAR).

Professional-Grade 3D Scanning
in Your Pocket.

Core Value Proposition

Traditional Method

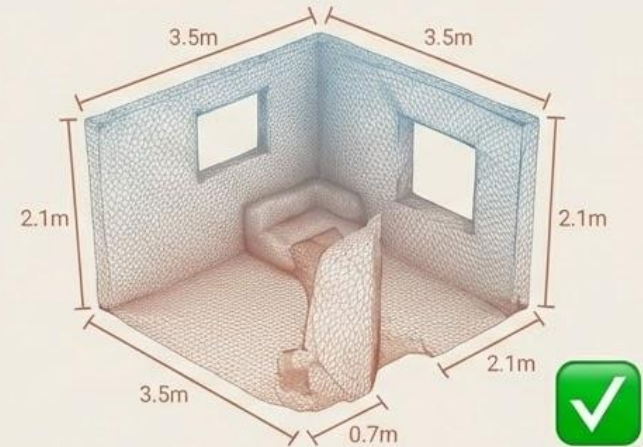


Slow, error-prone manual tape measures.

Revolutionizing
Renovation &
Construction



Medida-Class Solution



Fast, professional-grade 3D scanning.
Transforms handheld scan into usable
3D model and precise, verified
measurements "in minutes."

Key Features & Differentiators



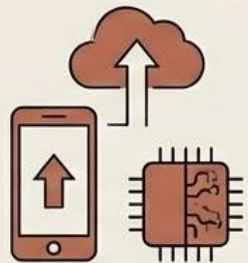
Millimeter-Level Accuracy

Cloud-based pipeline with global Bundle Adjustment, Manhattan-world alignment, and uncertainty-aware TSDF volumetric fusion.



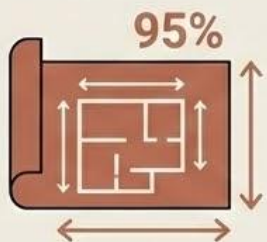
Photorealistic Output

Global color calibration, seam-optimized texture atlas, and optional neural rendering (e.g., 3D Gaussian Splatting).



Smart Cloud Offload

Real-time on-device capture/UX and heavy, high-fidelity computation on the cloud.



Automated Measurement Extraction

Identifies architectural elements and reports metric dimensions with quantified uncertainty.

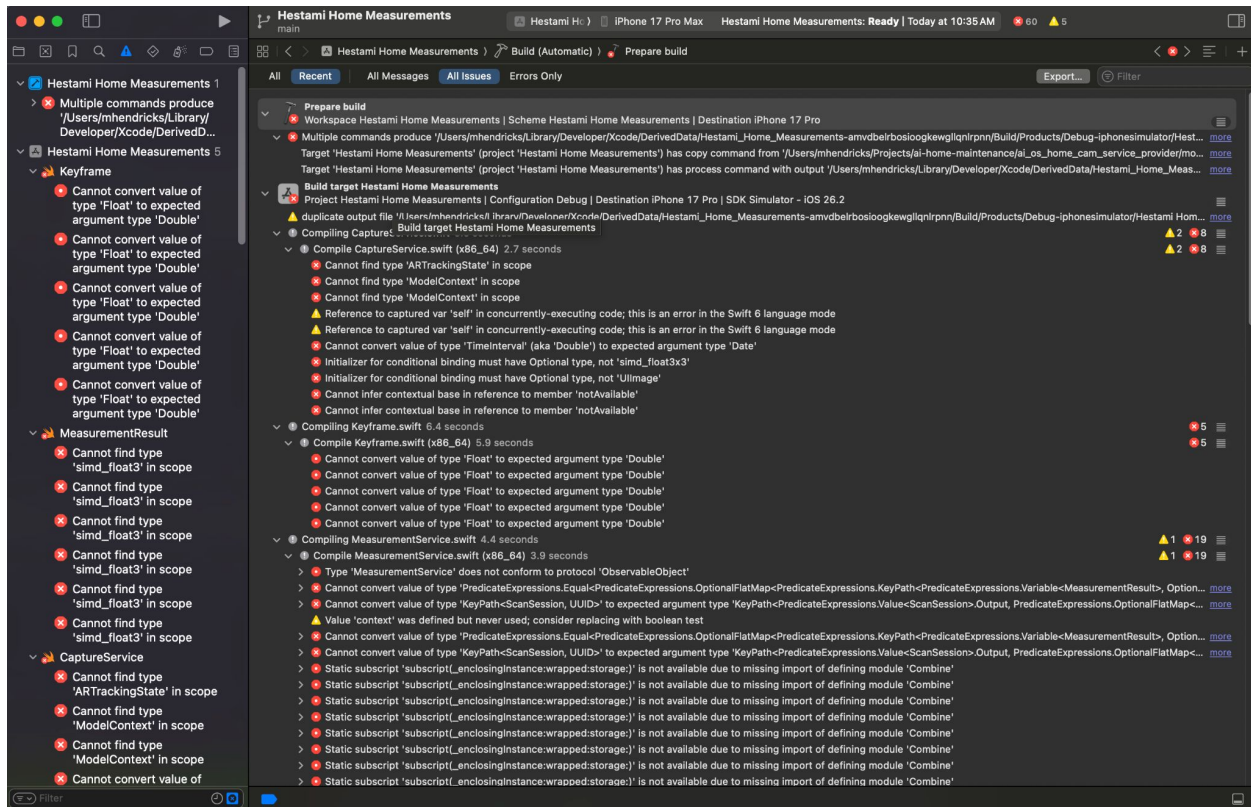
Z.AI GLM 4.7 - Observations and Feedback

- Windsurf - OK performance (but great performance with Claude Opus 4.5)
- Cline - **Trustworthy** performance (TBD performance with Claude Opus 4.5)

It's not clear what particular platforms are doing (or not doing) that make underlying LLMs perform better or worse. E.g., Google Gemini 3 is not too bad, even helpful in VS Code plugin; however in Antigravity, its use would not be recommended IMHO.

Pleasantly surprised by how well GLM 4.7 built out the iOS app + Cerebras was fast ("connectivity throttling" notwithstanding)

The image shows a mobile application interface for task management. At the top, there's a header bar with a dark background and white text. Below it, a progress bar indicates 74.2% completion. A green banner with white text says "21/21 All tasks have been completed!". The main content area lists tasks: "1 - the Cloud API has not been defined yet, however, it is likely only going to be something mini...", "2 - Cline wants to create a new file:", and "3 - iOS Implementation Summary.md". A green banner with white text says "Task Completed". Below this, a list of tasks is shown: "iOS Implementation Summary.md - Comprehensive documentation of architecture, features, and next steps", "Key Features Implemented", "3D Scanning - ARKit with LiDAR, intelligent keyframe selection, quality assessment", "Data Management - SwiftData persistence, local file storage, session lifecycle", "Cloud Integration - Multi-part upload, progress tracking, result download", "Measurement System - Multiple types, confidence scoring, validation, statistics", and "User Interface - Modern SwiftUI design, real-time feedback, export/share". A section titled "Next Steps" follows, stating "The foundation is complete. The following items are ready for the next phase:" and listing "Configure cloud API endpoints with actual server URLs", "Implement 3D model viewer using RealityKit", "Add unit tests for services", "UI/UX refinements and accessibility features", and "Performance optimization". At the bottom, there's a green banner with white text saying "All code follows iOS best practices with clean architecture, proper separation of concerns, and comprehensive error handling. The app is ready for testing on LiDAR-enabled devices (iPhone 14 Pro/Pro Max or later).". Below this, there are two green buttons: "View Changes" and "Explain Changes". At the very bottom, there's a dark purple banner with white text saying "Auto-approve: Read, Safe Commands, MCP". Below that, there's a dark purple banner with white text saying "Start New Task". At the bottom of the screen, there's a dark purple banner with white text saying "Type a message...".



Cline x Cerebas x Z.AI GLM 4.7 and Xcode

