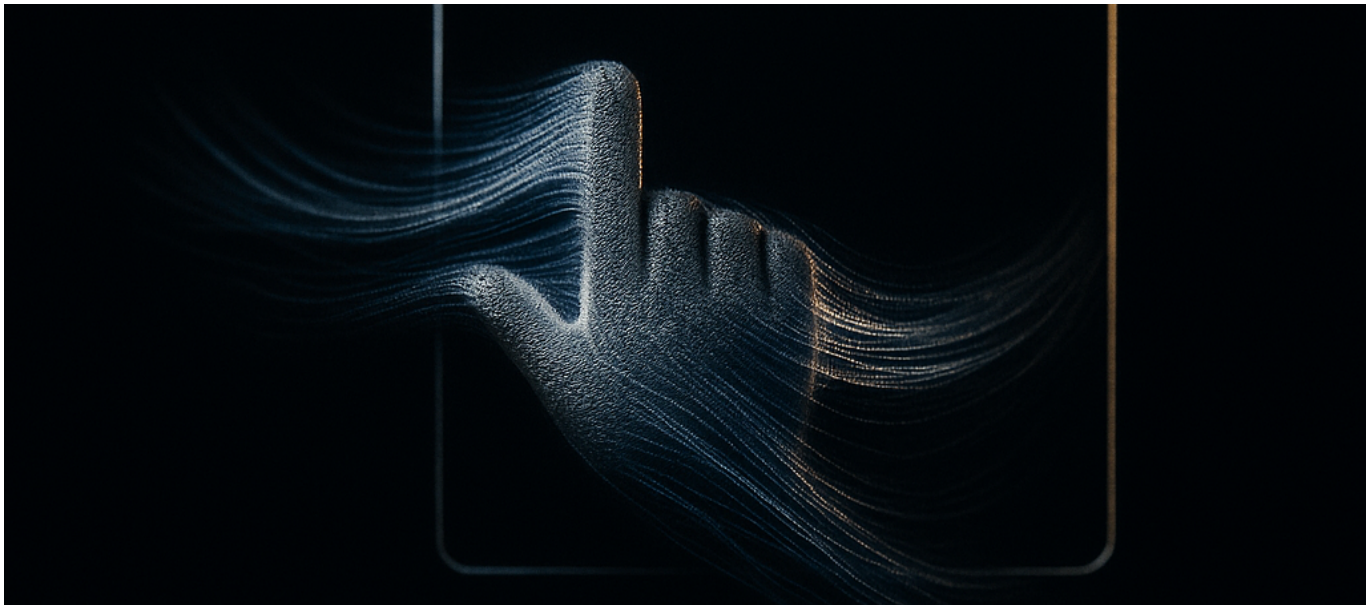

Sola Raises $17.5M Series A From Andreessen Horowitz After 5× Revenue Growth—Screen-Recording Automation Replaces Traditional RPA

Two MIT dropouts convinced a16z that watching someone work is better training data than writing code. Their $17.5M bet suggests RPA's thirty-year reign is ending.

The Funding: What Actually Happened

On August 19, 2025, Sola closed a $17.5 million Series A led by Andreessen Horowitz partners Kimberly Tan and Jennifer Li. This brings total funding to $21 million, following a $3.5 million seed round led by Sarah Guo at Conviction. Y Combinator continues as a participating investor.

The round follows what Sola reports as 5× revenue growth in 2025, though the company

hasn't disclosed absolute revenue figures. Co-founders Jessica Wu and Neil Deshmukh left MIT to build what they call "screen-recording-to-agent automation"—AI systems that learn workflows by watching humans perform them, rather than requiring engineers to script every click and keystroke.

Sola emerged from stealth alongside the Series A announcement, meaning the company has been quietly building and selling for at least a year before revealing itself publicly. The customer base focuses on back-office operations: claims processing, data entry, compliance reviews, and document verification.

Why This Matters: The RPA Problem Sola Is Solving

Traditional Robotic Process Automation has a dirty secret: most implementations fail or underperform. Industry studies consistently show that 30-50% of RPA projects don't deliver expected ROI, and the ones that do require constant maintenance as underlying systems change.

The root cause is architectural. UiPath, Automation Anywhere, and Blue Prism all rely on scripted automation. An RPA developer maps out every step: click this button, wait 200ms, extract text from this field, paste it here. When a web application updates its UI, the script breaks. When a workflow varies from the expected path, the bot crashes.

Sola's approach inverts this model. Instead of programming what to do, you show the AI what you do. A human records themselves processing an insurance claim. The AI watches, builds a model of the workflow, and then replicates it—adapting when screens look slightly different or when edge cases appear.

This is the difference between teaching someone by writing them a detailed manual versus teaching them by letting them watch over your shoulder. The manual is precise but brittle. The observation creates understanding that generalizes.

The Technical Shift From Scripts to Models

The distinction matters for anyone evaluating automation technology. Traditional RPA uses what engineers call "deterministic automation"—every execution follows the exact same

path. Sola's approach uses "learned automation"—the agent develops a probabilistic model of the workflow and makes decisions at runtime.

Consider a compliance review workflow. A scripted RPA bot needs explicit rules: if field A contains "LLC," check box B; if field A contains "Inc," check box C. Every variant requires a new rule. A learned agent observes that when field A contains certain patterns, the reviewer tends to check certain boxes, and it develops an implicit model of that relationship.

This doesn't eliminate errors—it changes their nature. Scripted bots fail catastrophically when they encounter unexpected inputs. Learned agents make probabilistic mistakes that look more like human errors. For many back-office workflows, the second failure mode is preferable because existing quality assurance processes already catch human-like errors.

Technical Architecture: How Screen Recording Becomes Automation

While Sola hasn't published detailed technical documentation, their approach fits within a broader category of AI systems that learn from demonstration—a field called "imitation learning" or "learning from observation."

The basic pipeline works like this:

- **Capture:** Record screen video and input events (mouse movements, clicks, keystrokes) as a human performs a workflow
- **Parse:** Use vision models to identify UI elements, extract text, and segment the screen into interactive components
- **Model:** Train a policy network that maps observed states (what the screen looks like) to actions (what the human did next)
- **Execute:** Run the learned policy on new instances of the workflow, using the same screen-parsing system to understand current state

The hard problems are in steps two and three. Modern vision-language models like GPT-4V or Claude's vision capabilities can identify UI elements reasonably well, but doing so at the speed and accuracy required for automation remains challenging. And the policy learning

needs to generalize—understanding that a button labeled “Submit Claim” and one labeled “Process Claim” serve the same function.

What Sets Sola Apart From Other Approaches

Several companies are pursuing similar ideas. Adept AI raised $350 million for its ACT-1 model, which also learns from demonstrations. Microsoft’s Copilot increasingly includes automation capabilities. Anthropic has discussed computer-use agents that can operate software interfaces.

Sola’s differentiation appears to be focus rather than technical uniqueness. While Adept and others pursue general-purpose computer agents, Sola concentrates specifically on back-office workflows with clear success criteria. This vertical focus allows for more targeted training data and clearer value propositions.

> The companies winning in AI automation aren’t building general-purpose agents—they’re building specialists that do one category of work extremely well.

The 5× revenue growth suggests this focus is paying off. Enterprises don’t buy general intelligence; they buy solutions to specific problems. A system that excels at claims processing is more valuable than one that can sort of do everything.

The Contrarian Take: What the Headlines Get Wrong

Most coverage of Sola positions this as “AI replacing RPA.” That framing misses the more important story.

First, this isn’t really AI versus RPA—it’s a spectrum. Sophisticated RPA platforms like UiPath have been adding machine learning capabilities for years. Their “Document Understanding” feature uses AI to extract data from unstructured documents. The distinction between “AI agent” and “smart RPA” is increasingly marketing rather than technical.

What Sola represents is a shift in the primary interaction model from programming to

demonstration. That's significant, but it doesn't make traditional RPA obsolete. Some workflows genuinely benefit from deterministic execution. When you absolutely must follow a precise regulatory sequence every time, a scripted bot provides guarantees that a probabilistic agent cannot.

Second, the 5× revenue growth number needs context. Growing from $500K to $2.5M is 5×. So is growing from $100K to $500K. Without absolute revenue figures, the multiple tells us velocity but not scale. Sola is likely still in the single-digit millions of ARR, based on typical Series A benchmarks for enterprise software. Impressive for a company emerging from stealth, but not yet proof of market transformation.

Third, the real innovation isn't screen recording—it's what happens after. The concept of learning from demonstration has existed in robotics for decades. What's new is that modern vision-language models make it practical for software automation. The screen recording is just data collection. The breakthrough is in the models that turn those recordings into reliable agents.

The Underhyped Angle

What most analysis misses: Sola's approach could solve the automation skills gap.

Traditional RPA requires specialized developers who understand both the target applications and the scripting language. These people are scarce and expensive. The average salary for a senior RPA developer in the US exceeds $130,000, and enterprise projects often require teams of them working for months.

If Sola's screen-recording approach works as advertised, the bottleneck shifts. Instead of needing developers who can code automation, you need subject matter experts who can perform workflows while recording. That's a much larger talent pool. The insurance adjuster who processes claims daily becomes the trainer for the AI that will eventually process claims automatically.

This democratization of automation creation is more significant than any technical improvement. The constraint on enterprise automation has always been implementation cost and complexity, not the automation itself.

Market Landscape: Who Wins, Who Loses

The enterprise automation market exceeds $15 billion annually and continues growing at roughly 20% per year. Sola's $21 million in funding makes it a small player by revenue, but a16z's involvement signals serious long-term ambitions.

Winners

Mid-market enterprises with manual-heavy operations: Companies too small for major RPA implementations but large enough to have repetitive workflows stand to benefit most. Traditional RPA economics require substantial volume to justify implementation costs. If Sola can drop the cost of automation creation by 80%, workflows that were previously uneconomical to automate become viable.

Operations and compliance teams: The people who actually do back-office work gain leverage. Their institutional knowledge of how workflows actually run—as opposed to how they're documented—becomes a valuable training resource.

Integration platforms: Companies like Workato, Tray.io, and Zapier that already orchestrate business processes could incorporate demonstration-based automation to expand their capabilities. Expect partnerships or acquisitions.

Losers

Traditional RPA implementation consultants: Large systems integrators like Deloitte and Accenture have built substantial practices around RPA implementation. If automation becomes self-serve through demonstration, that consulting revenue faces pressure.

Pure-play RPA vendors without AI capabilities: The smaller RPA vendors that haven't invested in machine learning face existential pressure. The transition cost of moving from scripted to learned automation advantages new entrants over incumbents maintaining legacy codebases.

Offshore BPO operations: Business process outsourcing companies that provide labor-arbitrage solutions for back-office work face acceleration of the automation threat they've

been managing for years.

Practical Implications: What Technical Leaders Should Do Now

If you're a CTO, VP of Engineering, or technical founder evaluating automation, here's the practical framework:

Audit Your Automation Candidates

Not all workflows benefit equally from demonstration-based automation. The best candidates have these characteristics:

- High volume (hundreds or thousands of instances per month)
- Moderate complexity (multiple steps, some judgment calls)
- Clear success criteria (you can tell when it's done right)
- Stable underlying systems (not changing every week)
- Expert performers available (people who do this well and can demonstrate)

Workflows that require significant reasoning, involve constantly changing systems, or lack clear correctness criteria remain better suited to human judgment or hybrid approaches.

Run Controlled Experiments

Don't bet your automation strategy on any single vendor. Run parallel experiments with different approaches:

- Traditional scripted RPA for stable, high-volume, simple workflows
- Demonstration-based systems like Sola for variable, moderate-complexity workflows
- AI assistants (Copilot, Claude, etc.) for knowledge work augmentation

Measure actual outcomes: error rates, maintenance costs, time to deploy, and flexibility when requirements change. The economics will differ by workflow type.

Invest in Process Documentation Through Demonstration

Regardless of whether you deploy Sola specifically, the practice of recording expert workflows creates lasting value. Those recordings become training data for any AI system—not just automation agents. They document institutional knowledge that typically exists only in people's heads. They reveal actual processes versus documented processes.

Consider implementing structured demonstration recording as a standard practice for key workflows, even before you've selected an automation vendor.

Watch the Integration Story

Sola and similar companies will need to integrate with enterprise systems: Salesforce, SAP, ServiceNow, and dozens of others. The quality of these integrations will determine practical utility. A beautiful AI agent that can't authenticate to your core systems doesn't help.

Evaluate integration capabilities as rigorously as automation capabilities. The best AI in the world is worthless if it can't connect to your data.

The Broader Context: What This Signals About AI in Enterprise

Sola's funding fits a larger pattern in enterprise AI investment. After the initial hype cycle of 2023-2024, capital is flowing toward specific applications rather than general capabilities.

The winners in enterprise AI share common characteristics: narrow focus, measurable outcomes, and clear buyer personas. Sola automates back-office workflows for operations leaders. Harvey automates legal research for attorneys. Glean automates enterprise search for knowledge workers. Each targets a specific problem with a specific customer.

> General-purpose AI is a research achievement. Specific-purpose AI is a business.

This doesn't mean general AI development is unimportant—the advances from OpenAI,

Anthropic, and Google enable all these applications. But the value capture happens at the application layer, where understanding of customer problems meets technical capability.

For technical leaders evaluating AI investments, this suggests a strategy: wait for general capabilities to mature, then identify specific applications where you have domain expertise or customer relationships. The foundation model providers will compete the cost of intelligence toward zero. The differentiated value lives in knowing what to do with that intelligence.

Where This Leads: The 6-12 Month Outlook

Based on current trajectories, here's what to expect:

Consolidation in the RPA market: The traditional RPA vendors will respond to the demonstration-based threat through acquisition or internal development. UiPath has already made moves toward AI-augmented automation. Expect at least one major acquisition of an AI-native automation startup by a legacy RPA vendor before mid-2026.

Demonstration recording as a standard practice: More enterprises will begin systematically recording expert workflows, even before deploying automation. This data becomes valuable regardless of which technology you ultimately use.

Quality assurance evolution: As learned agents make more probabilistic decisions, quality assurance needs to evolve. Instead of checking that bots executed the right script, QA will need to evaluate whether agents made reasonable decisions. This looks more like managing human employees than auditing code.

Regulatory attention: When AI agents start making decisions in areas like insurance claims and compliance reviews, regulators will ask questions about explainability and accountability. Companies deploying these systems should prepare for audit requirements that don't yet exist.

Sola specifically: With $21 million in funding and a16z backing, Sola has roughly 18-24 months of runway to demonstrate product-market fit at scale. Expect geographic expansion (likely Europe, given strong GDPR-driven demand for compliance automation)

and vertical expansion into adjacent use cases.

The Investment Thesis Behind the Check

Understanding why a16z made this investment reveals broader market conviction.

Kimberly Tan and Jennifer Li specialize in enterprise software at Andreessen Horowitz. Their portfolio reflects a thesis that AI will restructure enterprise software markets around new interaction paradigms. Sola fits this thesis: demonstration replaces programming as the primary way humans tell computers what to do.

The 5× revenue growth provides early validation, but Series A investments are fundamentally about market timing and team quality. The question a16z is answering isn't "Does Sola work?" but "Is this the right team at the right time to capture the market transition from scripted to learned automation?"

Jessica Wu and Neil Deshmukh's MIT background matters less than their decision to focus narrowly on back-office operations while others pursued general-purpose agents. That strategic choice—and the revenue growth it enabled—suggests operational judgment that transcends technical capability.

What Most Analysts Miss

The deeper story here isn't about automation technology at all. It's about how AI changes the economics of expertise.

For decades, automating a workflow required two forms of expertise: understanding the workflow itself, and understanding how to translate that into code. The second form—programming expertise—was scarce and expensive, creating a bottleneck.

Demonstration-based automation collapses these two forms of expertise into one. The person who understands the workflow can now create the automation directly, without a programmer intermediary. This is what programming languages tried to do (and failed) for fifty years.

The people who currently do the work become the people who train the agents that will do the work. This changes career trajectories, organizational structures, and the distribution of value capture from automation. The insurance adjuster who records the best demonstrations becomes more valuable than the one who simply processes more claims.

This shift matters more than any individual funding round. It's the beginning of a restructuring of how enterprises think about operational expertise.

The $17.5 million isn't a bet on a startup—it's a bet that showing will replace telling as the primary way humans teach computers to work.

WRITTEN BY

Artur Markus

Software engineer in Basel building AI infrastructure and agentic systems, with a background in pharmaceutical automation, GxP compliance, and validation. I help teams turn AI from a chatbot into a reliable operational layer.

Book a meeting