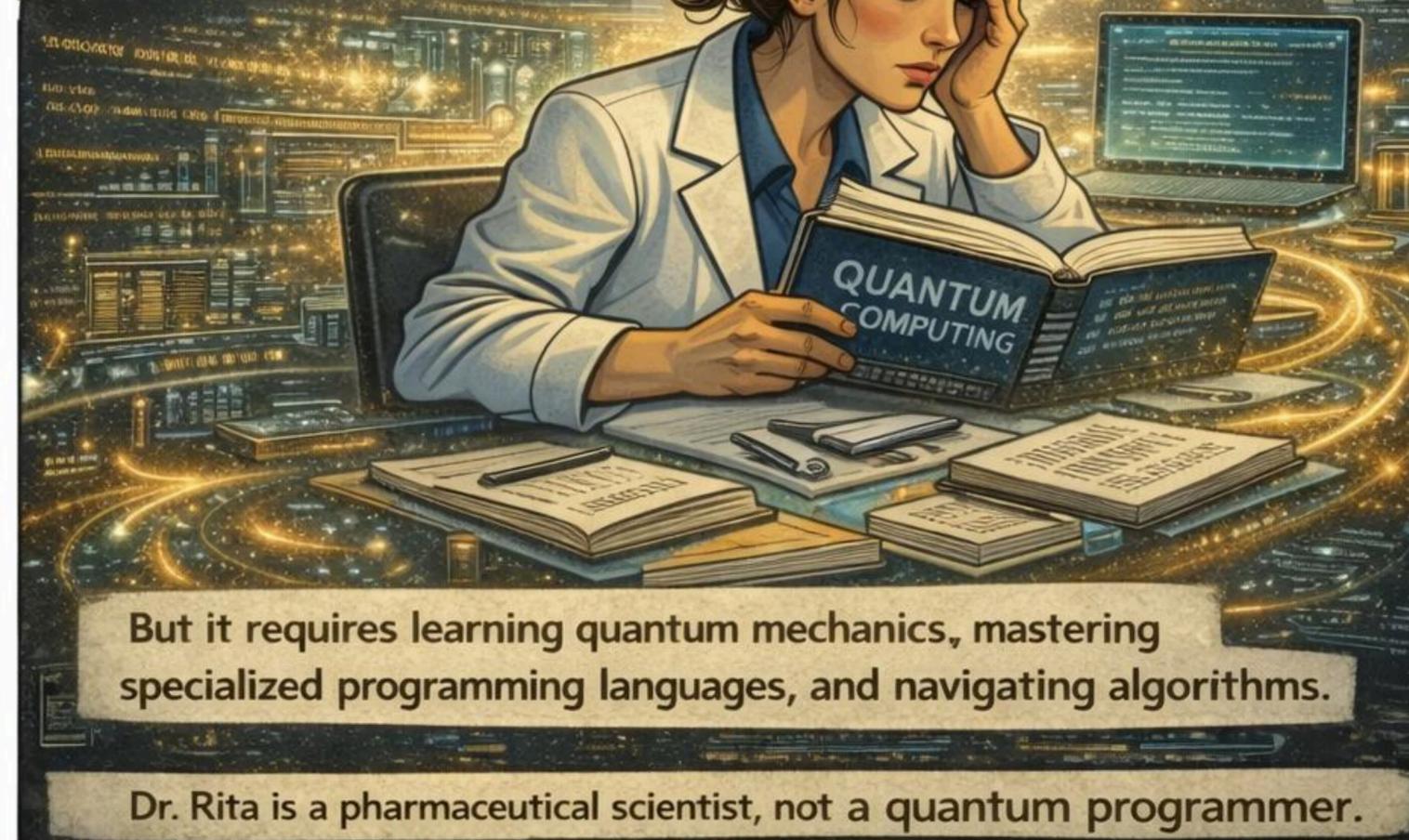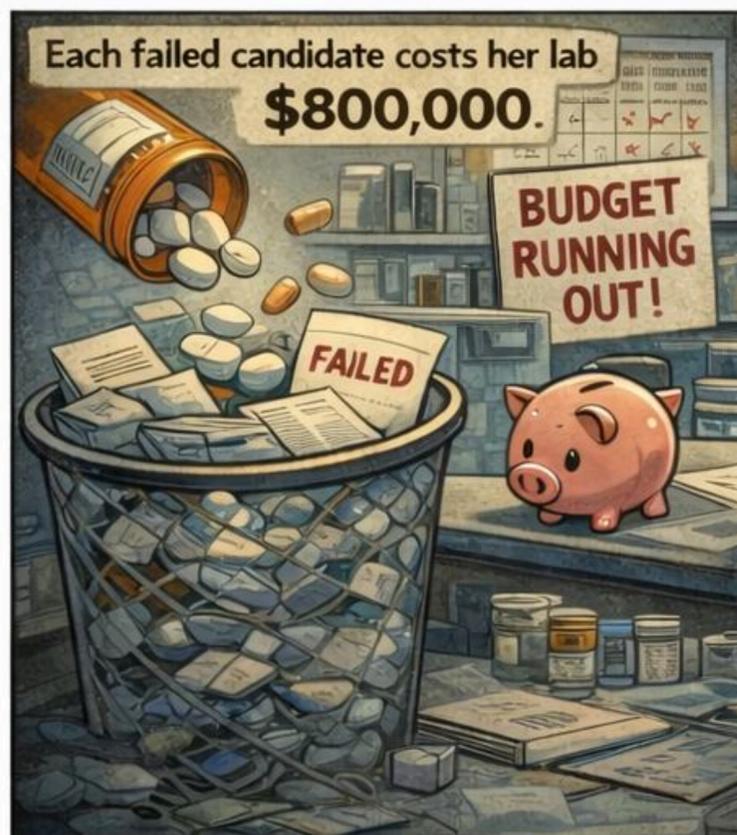# deepRealm

BUILDING QUANTUM SOFTWARE SYSTEMS

DISCOVER WITH EASE

She faces an impossible choice

- continue failing slowly with traditional methods
- risk everything on unreliable software predictions or abandon her research to become a quantum   computing expert.
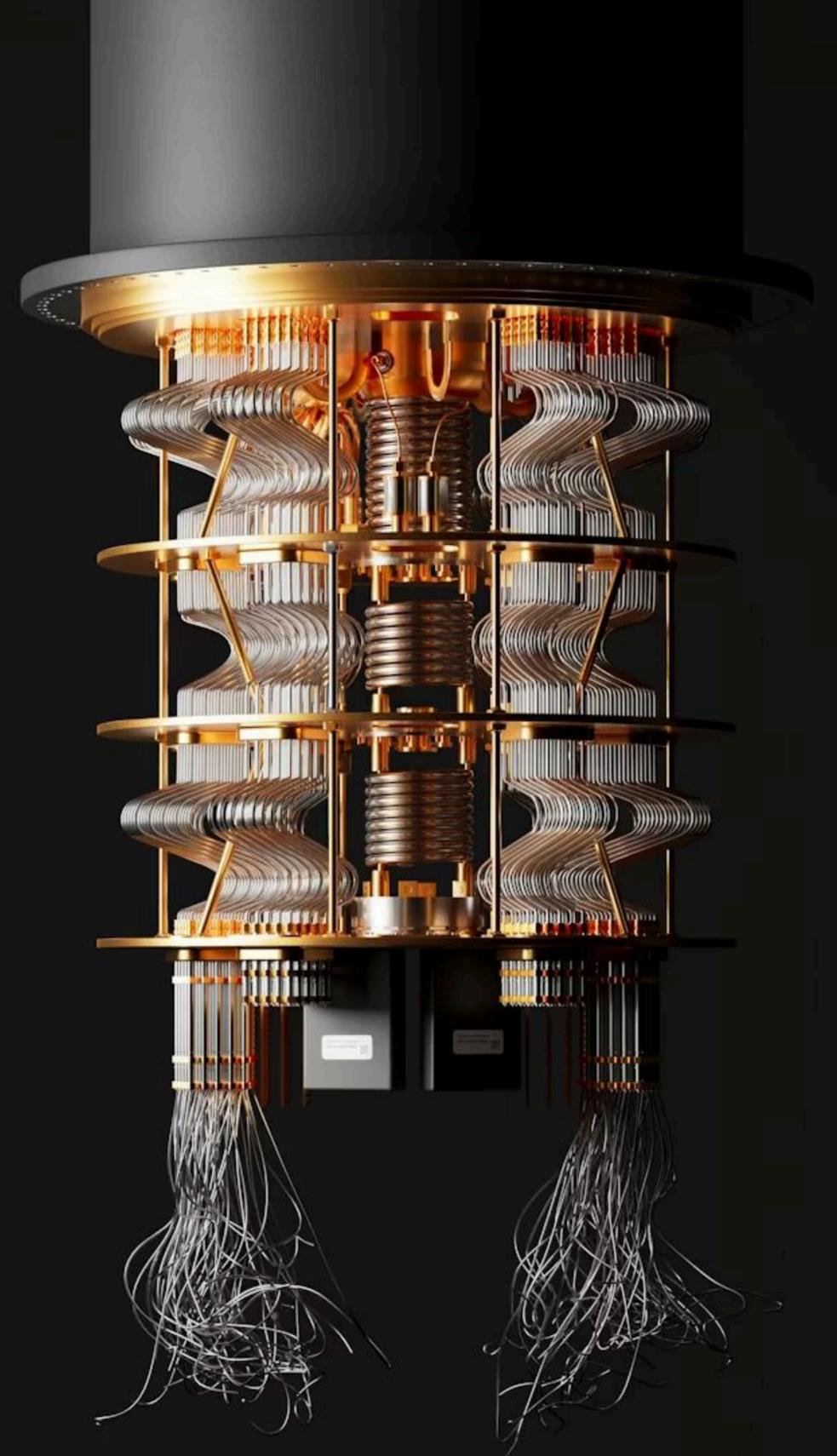
There has to be a better way.

The Solution

We will understand Dr. Rita's need and her scientific research workflows

And build software application having quantum algorithms running on quantum computers at the backend

Click-and-Run interface, quantum accuracy with no quantum expertise required.

Why now ??

Hardware immature, limited market pull
Too Early

Pre-2025

Large incumbents wait for fault-tolerant, Too Late

Post-2030

NISQ viable for pilots

Sweet Spot

2026-30

Deploy NOW while competitors do R&D. When quantum giants enter in 2028-30, researchers worldwide will already be trained on Kanad.

User feedback → product moat → network effects

Android did this

Competitive Landscape

Company		Fact	Our Edge
Schrödinger		$200M revenue, $1.3B market cap	Built on classical — ceiling exists
Zapata		Raised $200M, bankrupt 2024 (Started early with ambitious promises)	We conduct thorough market research and users validation
Others		General-purpose quantum hardware & platform provider	Need application layer (us)
Indian QC Startups		Mostly hardware, education, or algorithm-focused; very few end-user science platforms	**Massive whitespace**

The Opportunity

$1.1B (2024) → $12–30B by early 2030s

$31.8B (TAM)

$12.7B（SAM）

$450M（SOM）

Global Quantum Computing Software Market

Size, By Deployment, 2025-2034 (USD Billion) — On-Premises, Cloud-Based

Year	Value
2024	1.1
2025	1.5
2026	2.2
2027	3.0
2028	4.2
2029	5.9
2030	8.3
2031	11.6
2032	16.2
2033	22.7
2034	31.8
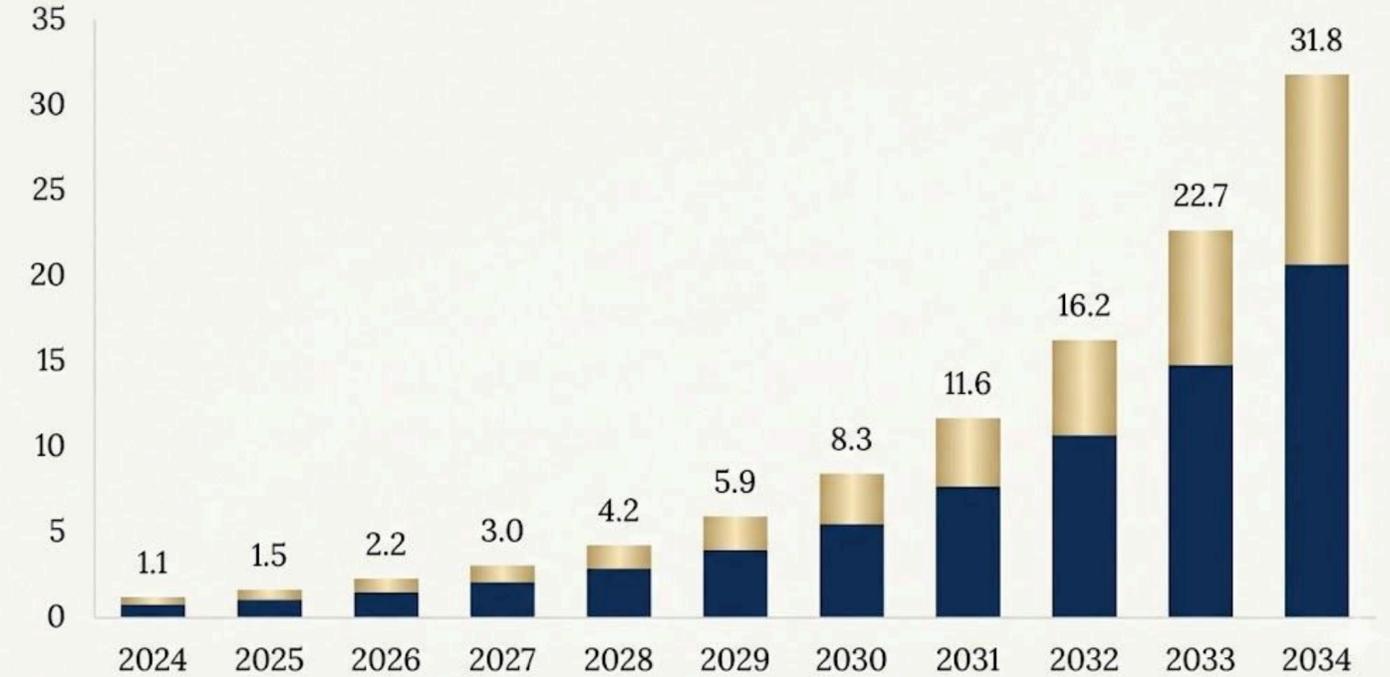
Quantum Computing Software Market, Share, By Application, 2024 (%)

Total Market Size (USD Billion), 2024: 1.1B

Optimization 40.5%
Machine Learning
Simulation
Others
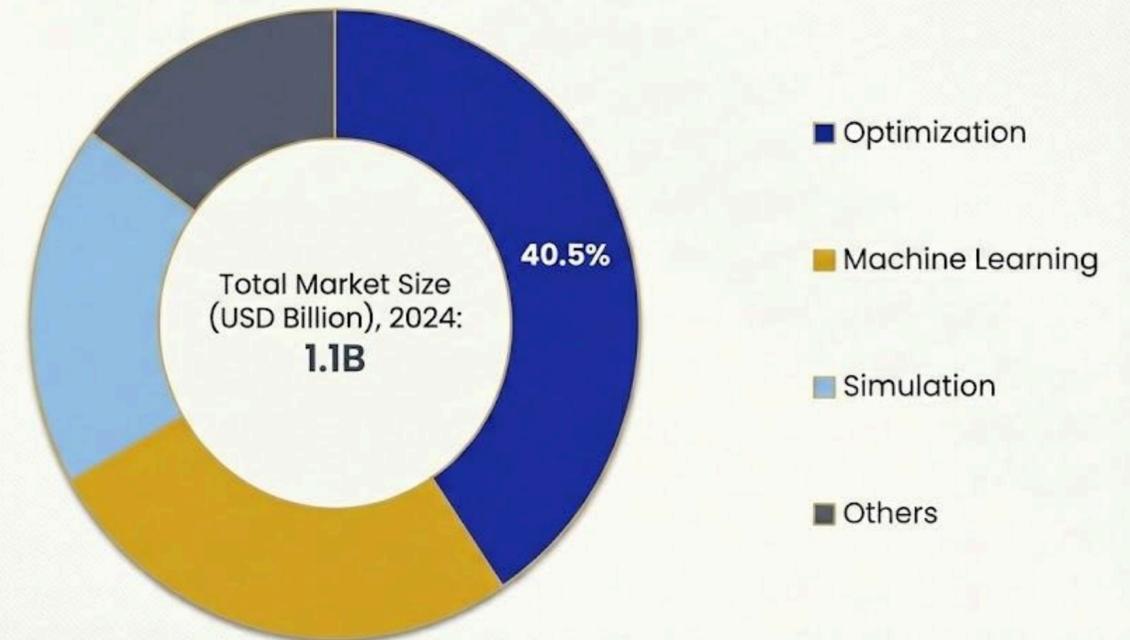
Kanad

Our platform seamlessly integrates domain-specific experimental workflows within an intuitive graphical interface, directly connected to quantum backend compute resources.
Delivered as a fully web-based application, it eliminates installation overhead and removes the complexity of accessing quantum computing infrastructure.

1. Build Molecule

2. Configure & Visualize
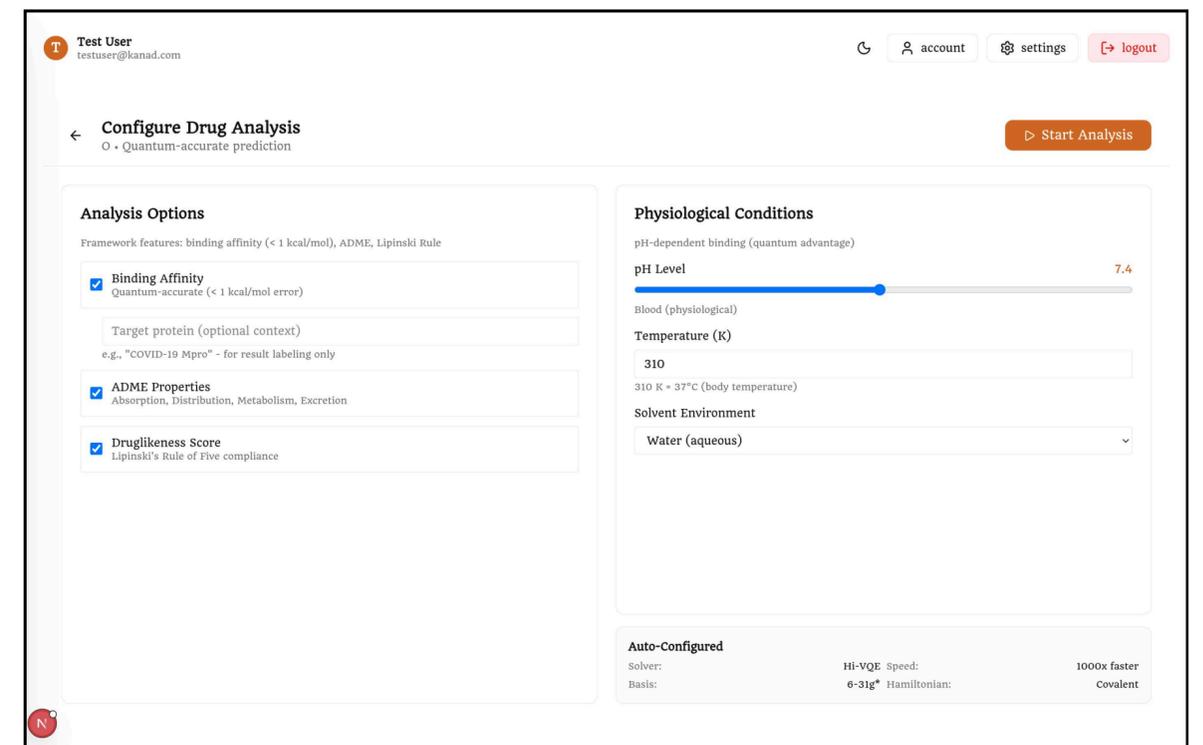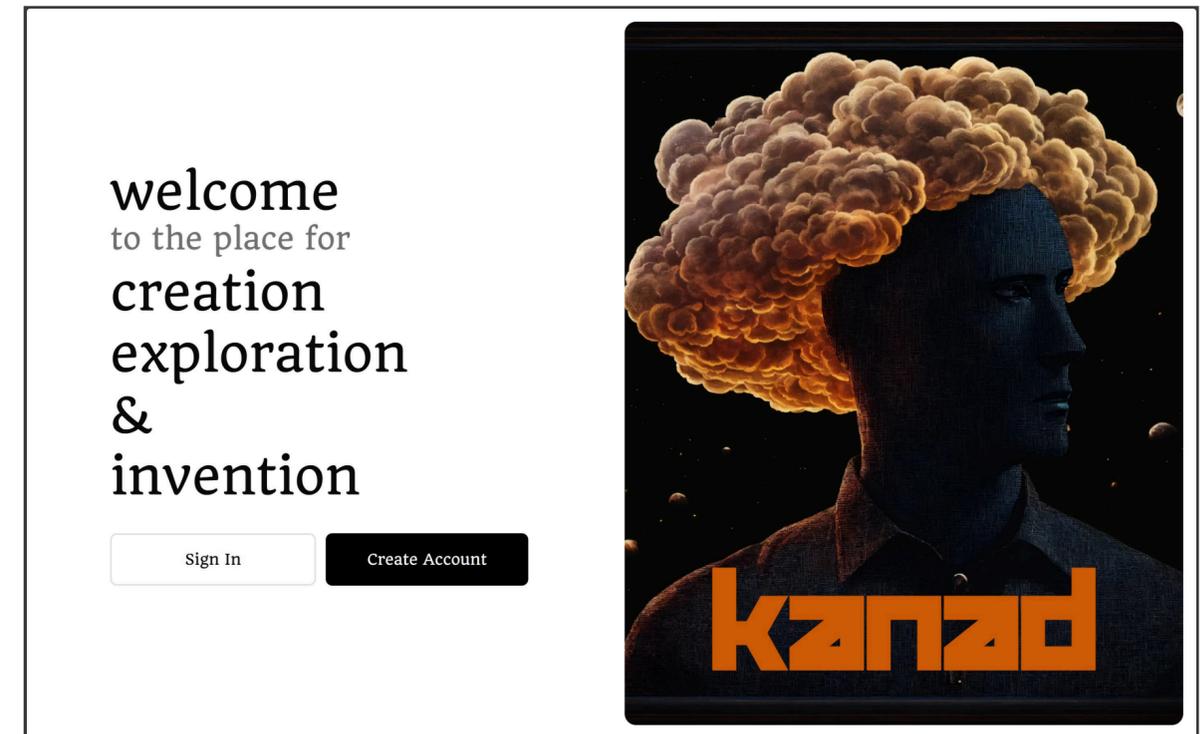
3. Run & Analyze

Simple steps make
Simple Science

welcome
to the place for
creation
exploration
&
invention

Sign In   Create Account

kanad

Test User
testuser@kanad.com

account   settings   logout

← Configure Drug Analysis
O • Quantum-accurate prediction

▷ Start Analysis

Analysis Options
Framework features: binding affinity (< 1 kcal/mol), ADME, Lipinski Rule

☑ **Binding Affinity**
Quantum-accurate (< 1 kcal/mol error)

Target protein (optional context)
e.g., "COVID-19 Mpro" - for result labeling only

☑ **ADME Properties**
Absorption, Distribution, Metabolism, Excretion

☑ **Druglikeness Score**
Lipinski's Rule of Five compliance

Physiological Conditions
pH-dependent binding (quantum advantage)

pH Level   7.4

Blood (physiological)

Temperature (K)
310
310 K = 37°C (body temperature)

Solvent Environment
Water (aqueous)   ⌄

Auto-Configured
Solver: Hi-VQE   Speed: 1000x faster
Basis: 6-31g*   Hamiltonian: Covalent

🌐 **kanad.xyz**

Market:

Research Institutes & Govt. Labs:
→ Kanad's quantum simulations

Pharma:
→ Kanad's ADME predictions

Aerospace, Cosmetics, Chemicals:
→ Kanad's quantum MD with environmental effects

Energy (Batteries, Fuel Cells):
→ Kanad's quantum energy calculations

Academic labs + select pharma & materials R&D teams
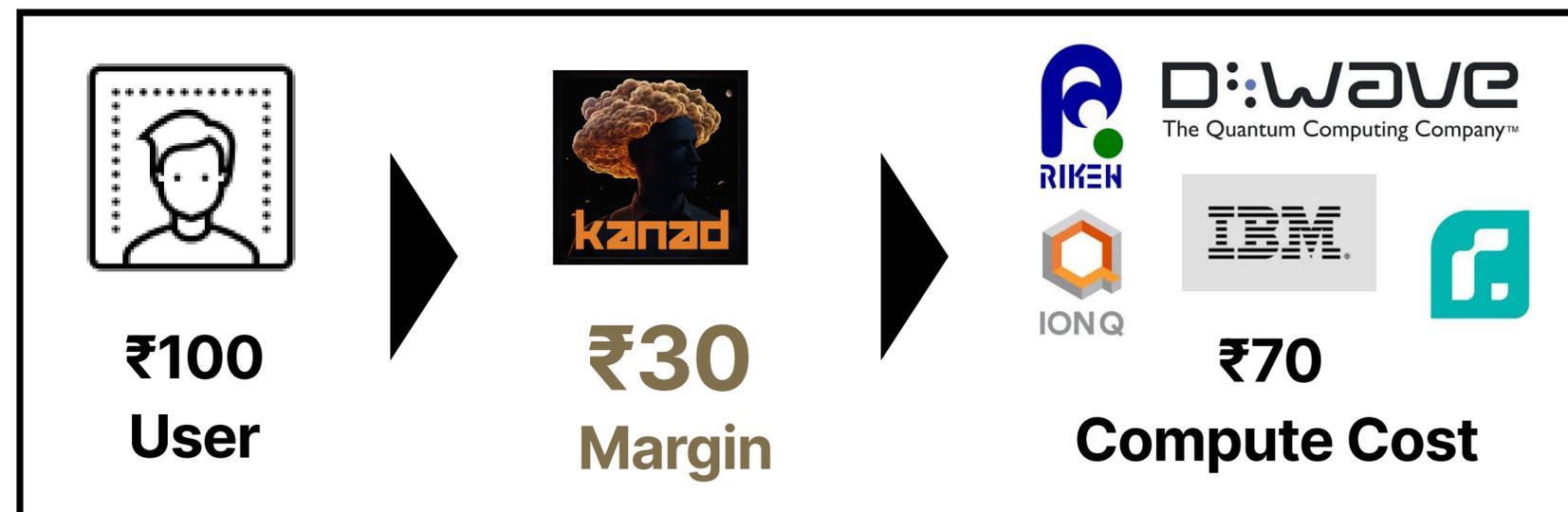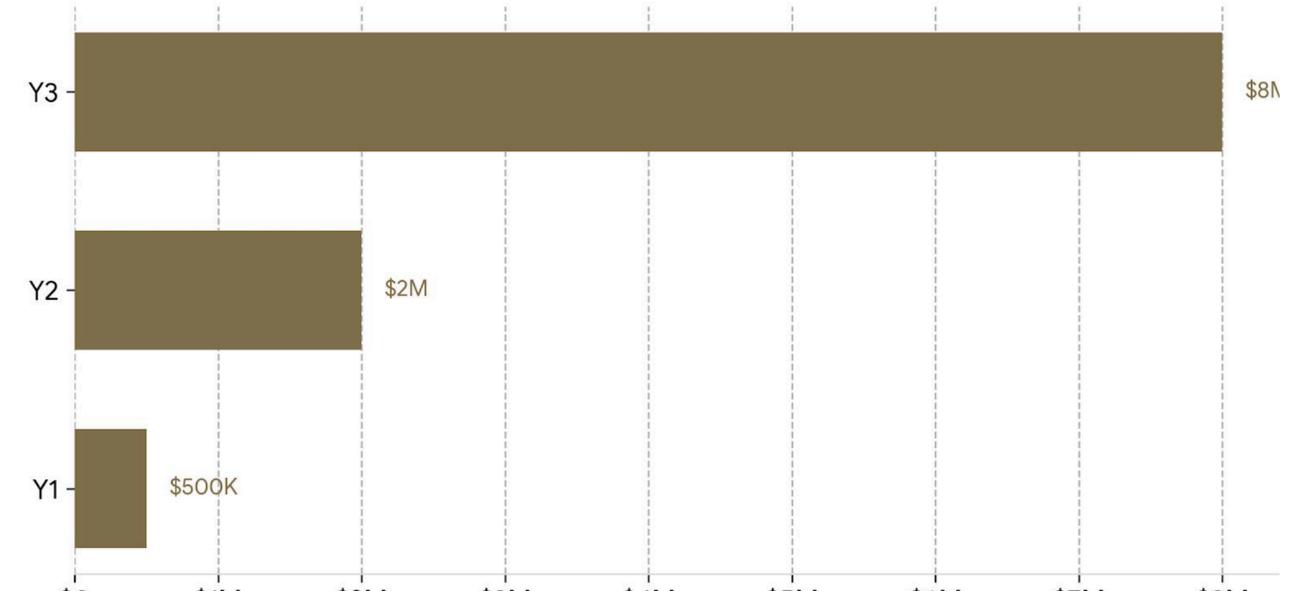**Pilots → platform contracts → enterprise workflows**

Business Model

Scalable : Monetizing Quantum-Native Labs

Freemium SaaS: Free basics hook researchers
Premium: $50-100/min (usage based; covers IBM costs)

Enterprise: $10K+ annual deals
(unlimited/institute-wide; custom pilots).

₹100 User	**₹30** Margin	**₹70** Compute Cost

"Users pay us. We pay Quantum hardware providers. We keep 40-45%."

Y3 — $8M
Y2 — $2M
Y1 — $500K

Go-to-Market

Phase 1
**Pilots 100 users
Leading IITs & IISc
labs**

Phase 2
**Partnerships &
Deals
IBM , Enterprises**

Phase 3
Scale users globally – Institutes & Enterprises

✓ MVP evaluated by academic labs
✓ 2000+ simulations run
✓ 10-20 pilots active

Strategic partnerships with NQM and Indian research institutes provide early pilot users

Pilot users made publications which validate platform capabilities

Capabilities will attracts enterprise customers and accelerates commercial traction."

Financials

Ask

₹4.60 Cr ($500K)

- - - - - - -

12-month runway
~₹35L/month burn

_____

12-MONTH MILESTONES

✔ **Hire: 2 Devs + 1 Manager**
✔ **Build: MVP deployed, quantum integrated**
✔ **Scale: 100-200 pilots, enterprise-ready**

→ **Path to break-even: 10 enterprise pilots by 2027**

Classical Cloud
(Azure HPC/Server)
1 Cr

Quantum
Backend
2.3 Cr

Extra Buffer
0.64 Cr

Human
Resources
0.29 Cr

Office Setup
0.17 Cr

Travel & Pilot 0.20 Cr
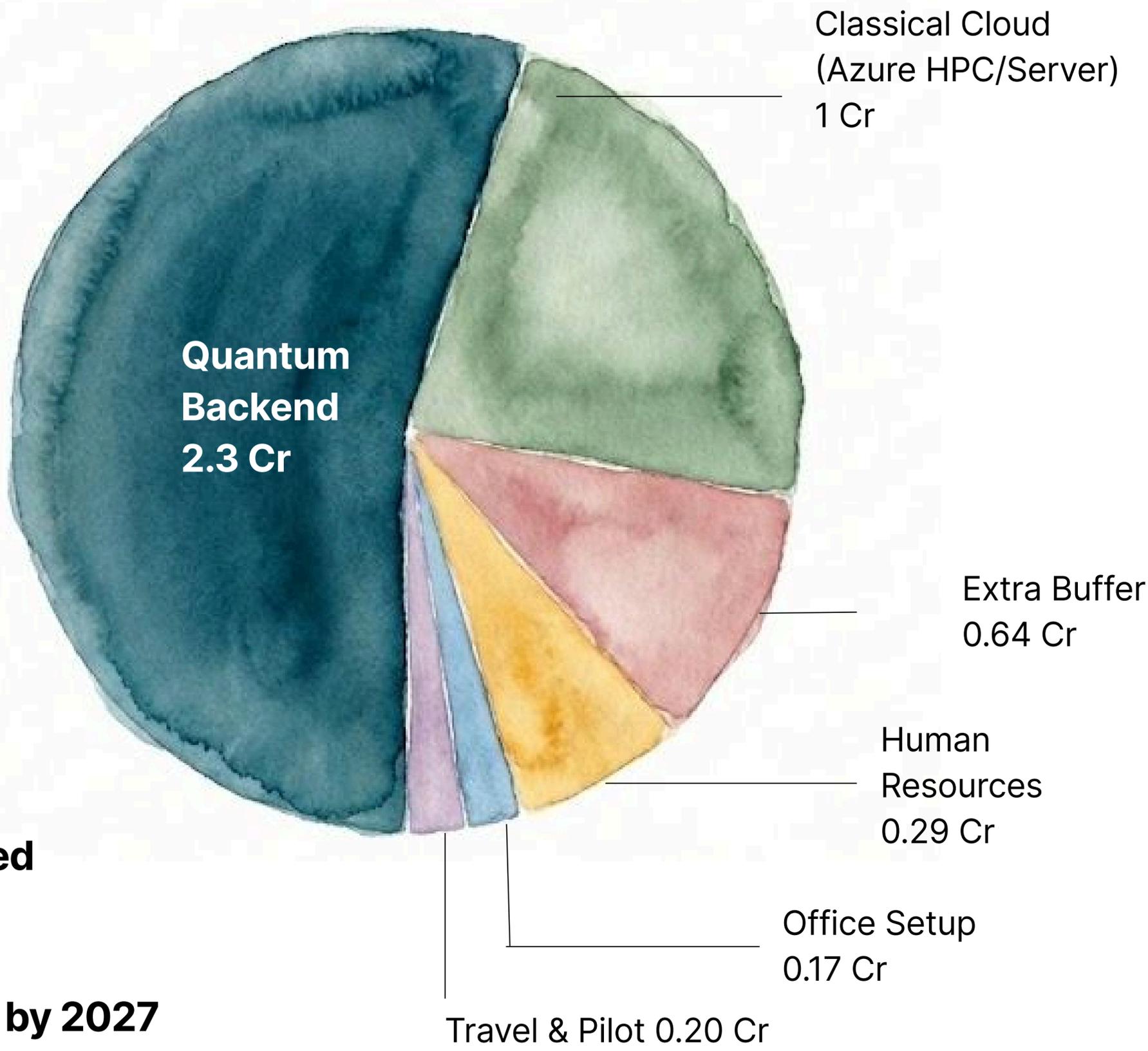
Mukul Kumar

- 19 yr old drop out
- Understand Quantum algorithms with 2-3 years of experience

Vivek Pal

- System Engineer &
- Managing execution and Product Development with 6+ yrs of Exp.

Why us !!

In 2024, after graduating high school, Founder began studying quantum computing research on arXiv. While reproducing molecular simulations using IBM Qiskit, He realized quantum computers could instantiate physical processes, not just compute approximations. He built Antinature, listed in IBM's ecosystem, and presented at a Kolkata conference.
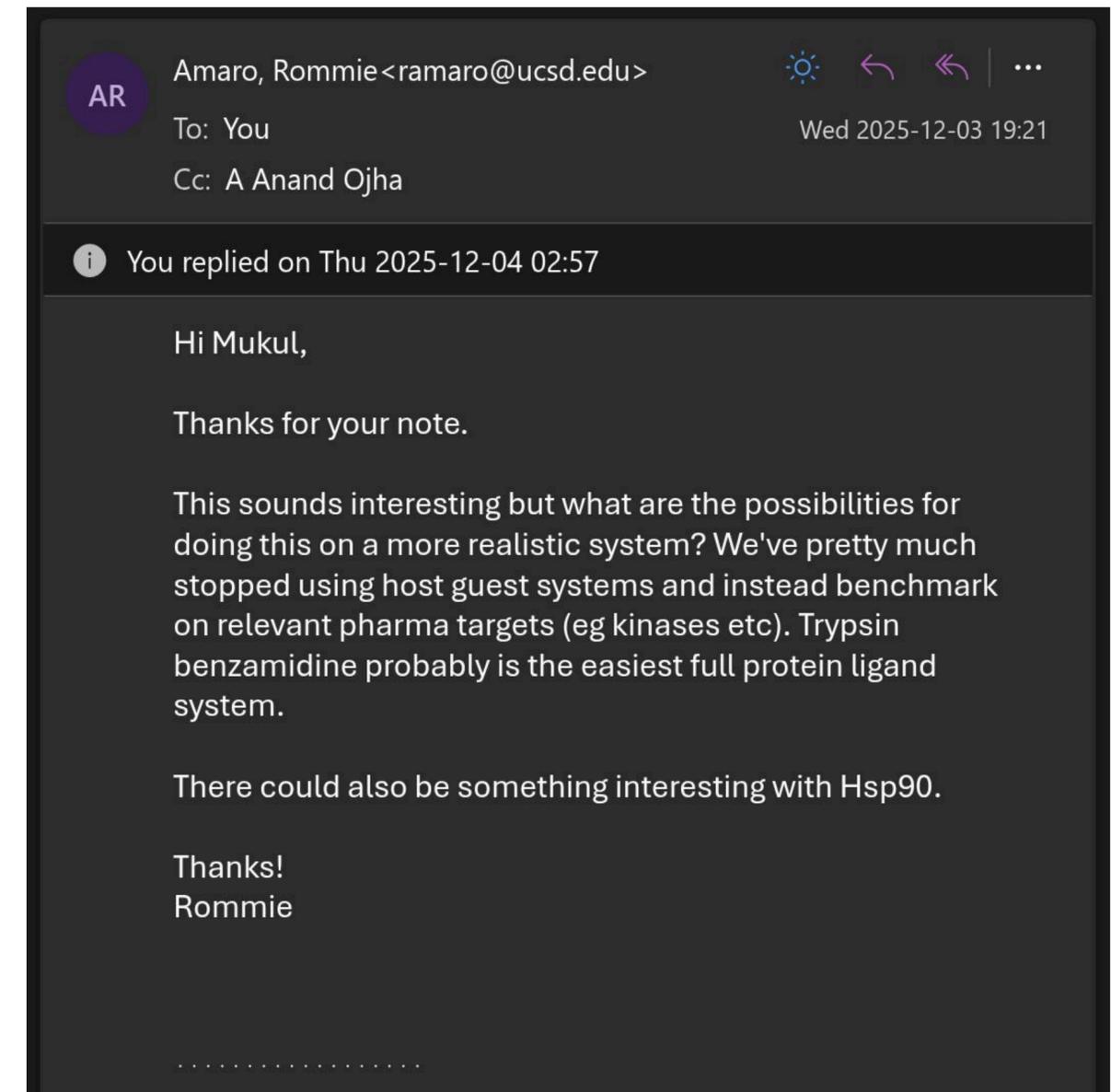
& Also

To validate demand, we incorporated a company and built a prototype platform allowing scientists to run quantum simulations through simple interfaces—no coding required. Through demos at IIT BHU, IISc, and direct user engagement, we discovered researchers wanted laboratory-like workflows, not programming tools.

The insight: quantum collapses experimental costs toward zero, enabling massive parallel exploration impossible in physical labs.

We're now building modular digital laboratories—starting with simple experimental workflows, then expanding to Advance, chemical, and pharma labs, eventually integrating AI agents for autonomous discovery.

Ideation & early validation: Rapidly built an initial prototype and demonstrated it in-person at IIT BHU and IISc, and through online technical sessions with multiple researchers, receiving strong validation and concrete technical feedback.

Scientific pull: The prototype and approach led to exploratory discussions on extending the work to realistic biomolecular systems with **Rommie Amaro**, a leading biomolecular dynamics researcher at University of California San Diego.

exploring new ways f... ›

lets do our bioscientific research with quantum advantage

Event Page ↗

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At a Glance

● **28** Going

Invite Guests   Check In Guests   Guest List
Hidden

AR Amaro, Rommie<ramaro@ucsd.edu>
To: You   Wed 2025-12-03 19:21
Cc: A Anand Ojha

ⓘ You replied on Thu 2025-12-04 02:57

Hi Mukul,

Thanks for your note.

This sounds interesting but what are the possibilities for doing this on a more realistic system? We've pretty much stopped using host guest systems and instead benchmark on relevant pharma targets (eg kinases etc). Trypsin benzamidine probably is the easiest full protein ligand system.

There could also be something interesting with Hsp90.

Thanks!
Rommie

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Thank you