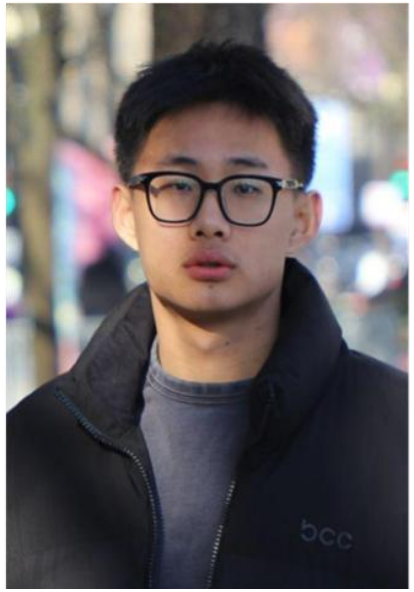

LSEC Venture Grant Program| January 2025

# Obsidian Performance Gear

# Obsidian Performance Gear | Our Team

**Bikram**

Master of Engineering
Industrial Operations
Ex- Paymentos



**Yijin**

Master of Science
Civil Engineering
Ex- Siemens

**Dinesh**

Master of Engineering
Industrial Operations
Ex- Samsung R&D

**Erfan**

Master of Engineering
with Robotics
Ex- SpaceX, Tesla

**Kieran**

Master of Engineering
with Robotics
Ex- LockheedMartin

# **Obsidian Performance Gear** | The Problem

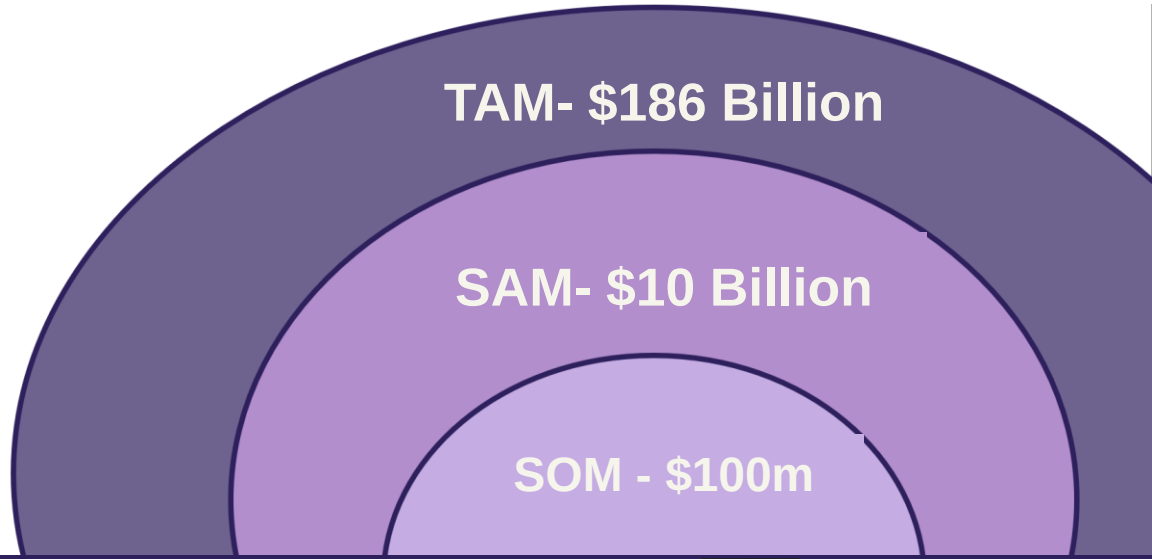
## Gyms can be scary…

- 50% of Americans feel too intimidated to develop a workout routine in front of other people
- Fear of judgement prevents people from exercising correctly- leading to frustration and dropout
- Lack of guidance leads to frustration and dropout.

**There is a need for a product that helps new gym-goers build confidence and self-reliance.**

# **Obsidian Performance Gear** | The Opportunity

- The global fitness market has over **184 million gym members**, millions of sports players, and a booming **$186 billion** wearable tech market by 2030.
- **Obsidian Performance Gear** targets these users with a unique, data-driven tool to enhance performance, prevent injuries, and empower confident, independent training worldwide.
- Our solution serves a **diverse market** including:
  1. Posture Correction
  2. Physical Therapy
  3. Sports Training
  4. Elderly Mobility



# Obsidian Performance Gear | Our Idea

## How do we solve this?

**Sensors placed anywhere on the body to gather data and optimize technique for any gym exercise or sport**

Post Workout Analysis helps refine technique through personalized recommendations, **building confidence, improving performance and reducing the risk of injury**

**User Journey**

**Desired Exercise chosen on mobile app**

**Sensors Positioned on body as instructed**

**Sensors gather data during exercise**

**Analysis on form given after exercise**

# Obsidian Performance Gear | Competitive Landscape

| | OBSIDIAN WEARABLE FITNESS | fitbit | WATCH | str8bat (only cricket) | WEARABLE X (only yoga) |
|---|---|---|---|---|---|
| Motion Tracking | ✓ | | | ✓ | ✓ |
| Real-Time Feedback | ✓ | ✓ | ✓ | | ✓ |
| Injury Prevention | ✓ | | Limited | | |
| Customization | ✓ | Limited | ✓ | | Limited |

**Our product has a unique offering of complete 3D motion tracking, tailored recommendations and Injury Prevention**

# Obsidian Performance Gear | What We Found

## Key Interview Insights

After customer discovery with over **50 individuals** through the NSF I-Corps program


“Motivation is maintained by personalizing workouts and providing tailored feedback during 1:1 sessions, ensuring players feel cared for.

**Jack Shaughnessy**
Founder/Coach
OTP Basketball

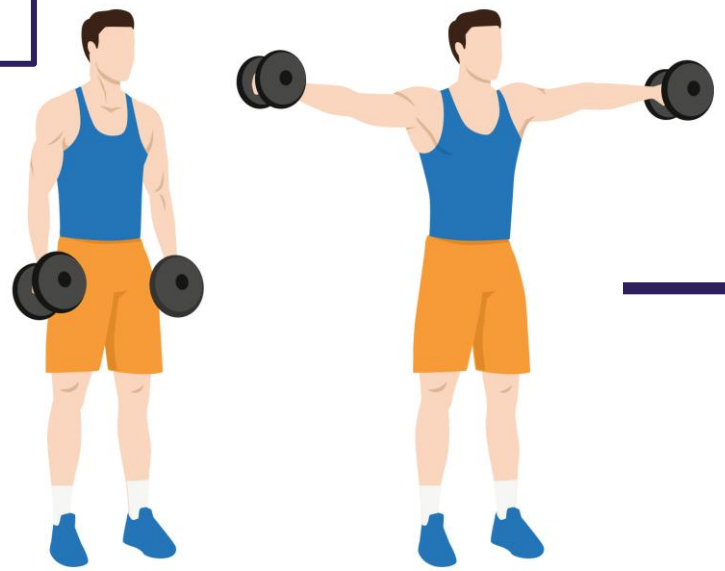
**Pratyanshu Tomar**
Indian National
Basketball Player

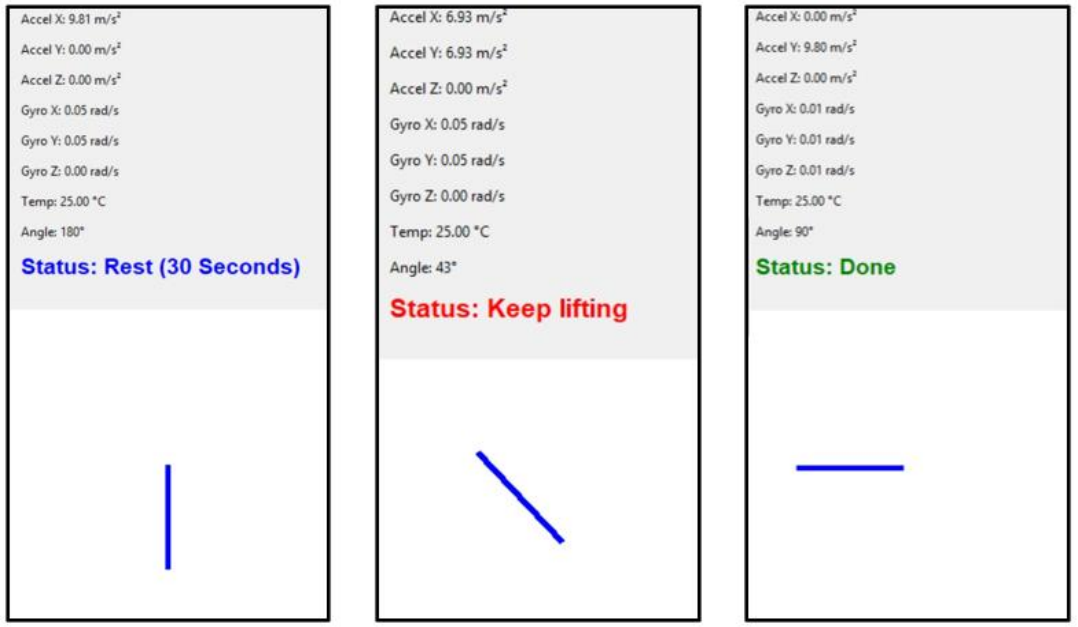

"If I had a device that could help me master the fundamentals and elevate my performance while training alone, it would make all the difference when I step onto the big stage."

Our customer discovery confirmed strong interest and demand for our product. Amateurs saw it as a way to overcome gym intimidation, coaches recognized its potential to enhance player performance, and many were willing to pay **$200+** for it.

# **Obsidian Performance Gear** | Current Tech Demo

**Dumbbell Lateral Raise Example**






**Current State:** We track user angles, lifting posture, and notify if movements need correction

**Additional Current Cabability:** Limited 3D motion tracking, user app integration

# Obsidian Performance Gear | Next Steps

## TECHNOLOGY

1. Finalize hardware design
2. Collaborate with personal trainers to improve training data
3. Create AI model for enhancing personalized recommendations

## BUSINESS

1. Explore provisional patents for technology and algorithms
2. Begin pilot program in fitness centers and sports academies
3. Collaborate with experienced manufacturing partners to understand cost