



# INJURIES ARE EXERCISE-AGNOSTIC

#### CROSSFIT

"...(73,5%) HAVING SUSTAINED AN INJURY DURING CROSSFIT TRAINING."

#### YOGA

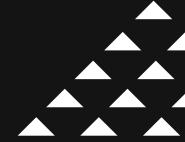
"YOGA CAUSES
MUSCULOSKELETAL PAIN IN
10% OF PEOPLE
AND
EXACERBATES 21%
OF EXISTING
INJURIES..."

### HIT

"FINDINGS FROM A DESCRIPTIVE SURVEY SHOW THAT IN A HIIT EXERCISE REGIMEN...
YIELDING AN INJURY PREVALENCE OF 46.5%..."

### **POWERLIFTING**

"63.9% OF THE RESPONDENTS REPORTED HAVING AN ACUTE POWERLIFTING-RELATED INJURY DURING THEIR POWERLIFTING CAREER."



TAM: 184.61 Million

SAM: 103.38 Million

SOM: 72.36 Million

# GLOBAL OPPORTUNITY SPACE

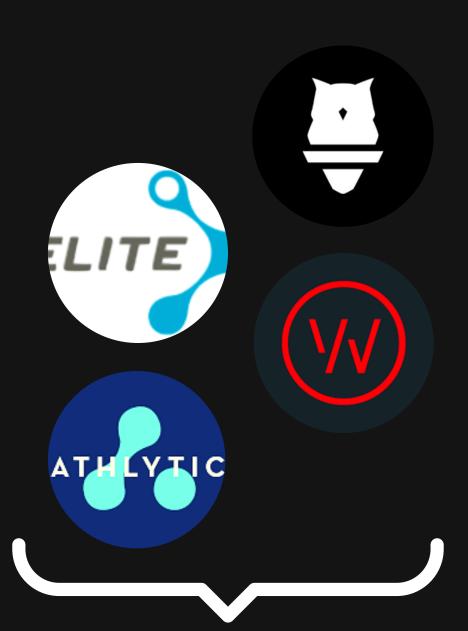
TAM- # of people who workout

SAM- # of people who have sustained an exercise injury

SOM- # of injuries that require medical treatment

"PROJECTIONS ESTIMATE THAT THE LFITNESSI INDUSTRY WILL REACH A REVENUE OF 434.74 BILLION BY 2028, GROWING 171.75% FROM 2021."

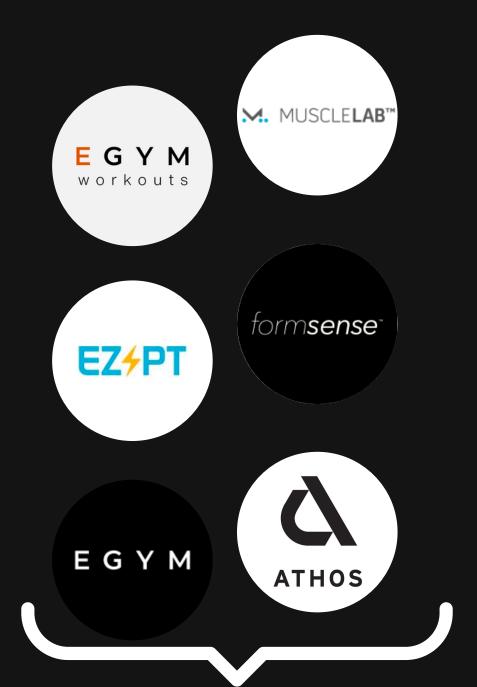
## COMPETITIVE ANALYSIS







**Physical Items** 



Form Correction
Technology

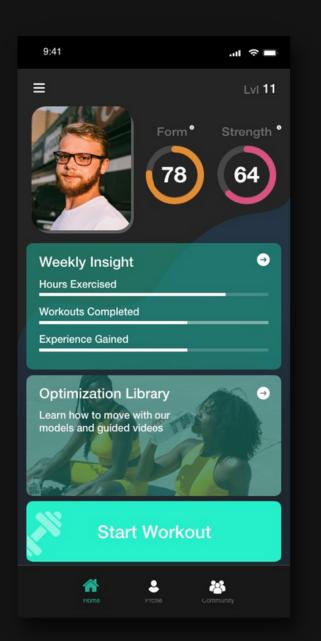
## BUT COMPETITORS ARE NOT CAPITALIZING ON ALL THE OPPORTUNITIES POSSIBLE IN THE SPACE... UNLIKE VERUM

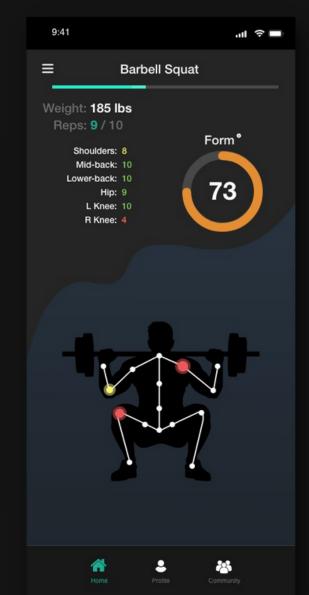
- Non-Intrusive Technology that utilizes a high-fidelity 3D modeling algorithm
- Unrestricted access to review historic workouts and 3D models
- Gamified user experience that rewards progress and nurtures development
- Actionable insights as a person exercises for real-time improvement

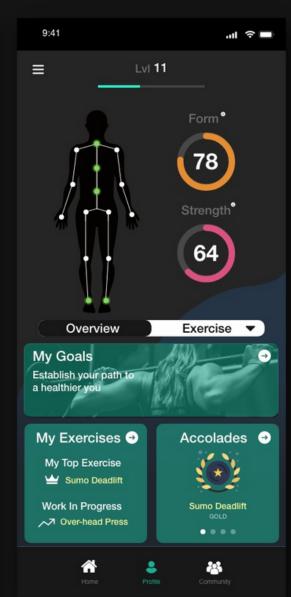
# SOLUTION

VERUM'S ELEVATE IS THE MOST MOBILE AND SOPHISTICATED 3-D MODELING SOFTWARE FOR YOUR FITNESS JOURNEY

Verum uses a combination LiDAR and Optical sensors, computer vision, machine learning, and an open ecosystem to immerse individuals into a comprehensive training supplement to reduce the risk of injury as a person exercises.









## ERAS OF WEIGHTLIFTING

DUMBBELLS, RESISTANCE TRAINING, ROPES BASIC SKELETONIZATION
SOFTWARE YOU SEE TODAY

BASIC EQUIPMENT

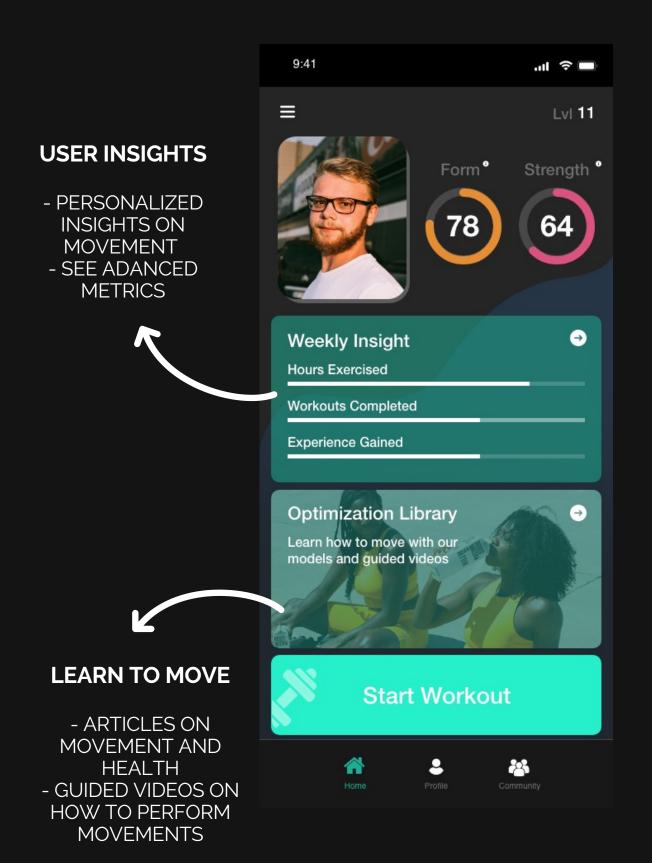
COMPETITIVE WEIGHTLIFTING

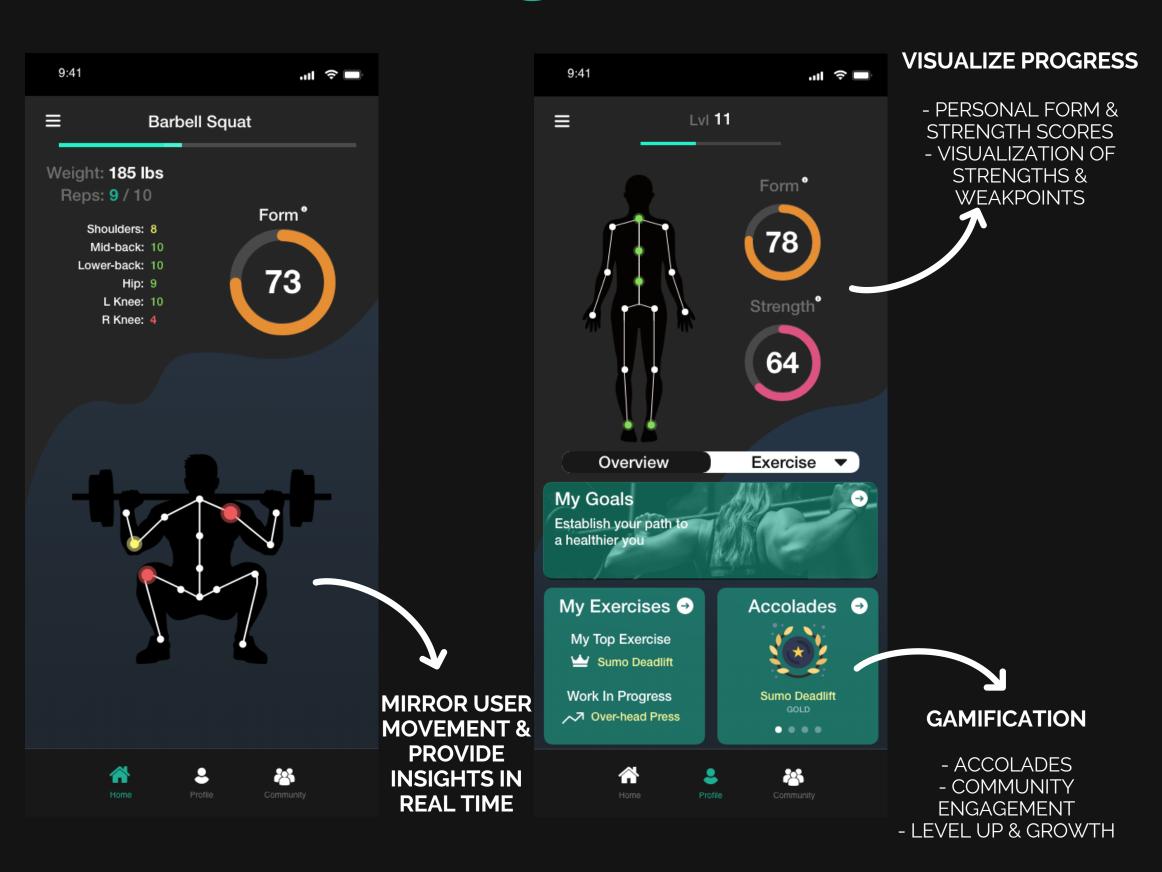
NEW-AGE TECHNOLOGY VERUM MOVEMENT

BARBELL TRAINING AND MACHINE EQUIPMENT

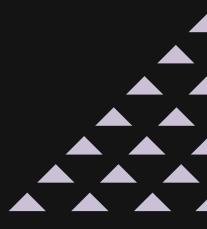
FIRST-OF-ITS-KIND
OPEN ECOSYSTEM FOR
FITNESS AND EXERCISE

## USER EXPERIENCE



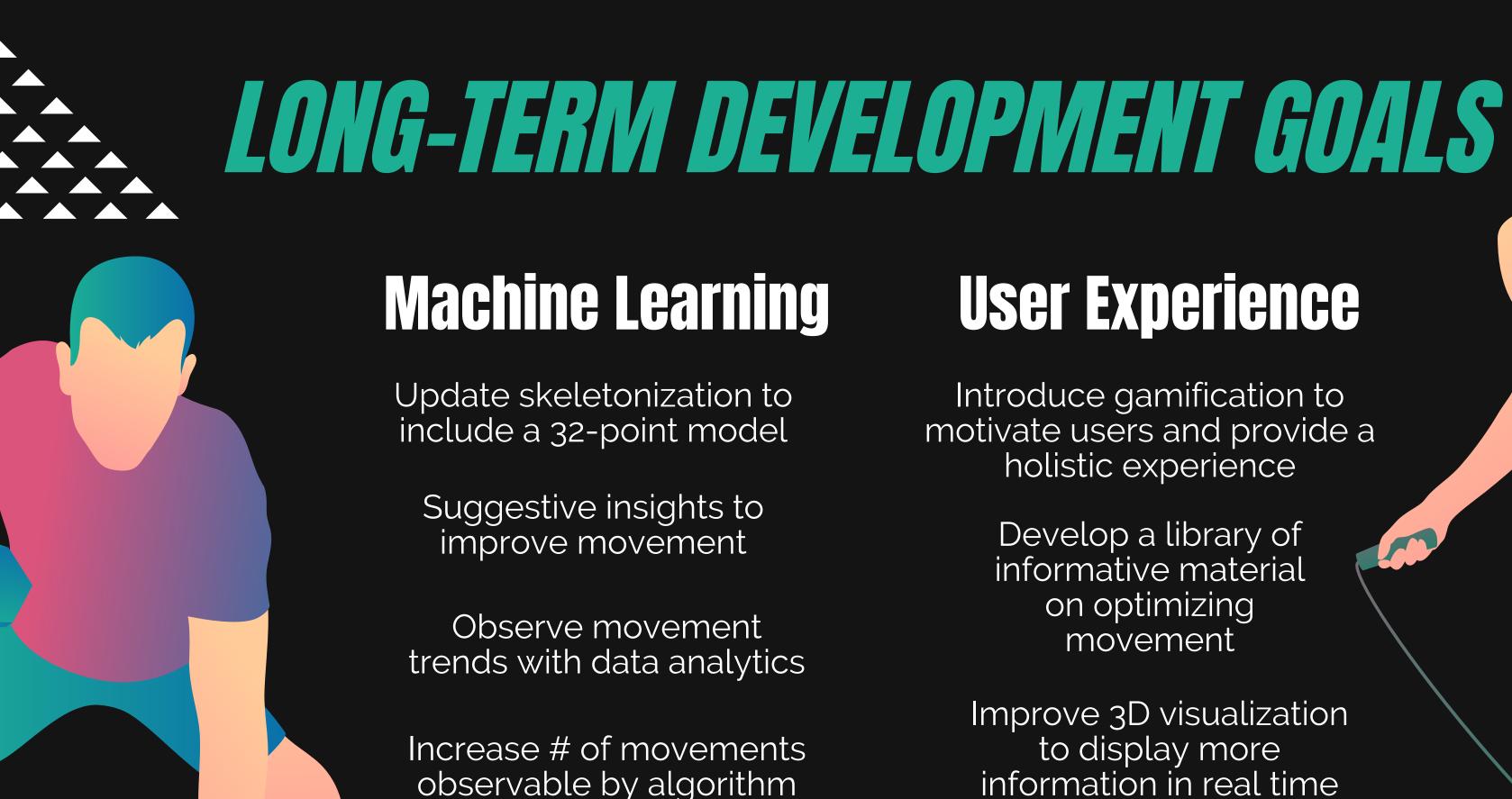


## COMPUTER VISION ALGORITHM



**TEAM TESTING** 

**USER TESTING** 



## BUSINESS MODEL

## Affordable Upfront Costs

Partners will purchase our sensors at cost



## **Ecosystem and Software Annual Subscription**

Based on the number of users a gym has, a subscription tier will be purchased for access to ecosystem and skeltonization software



#### **Technical Innovation**

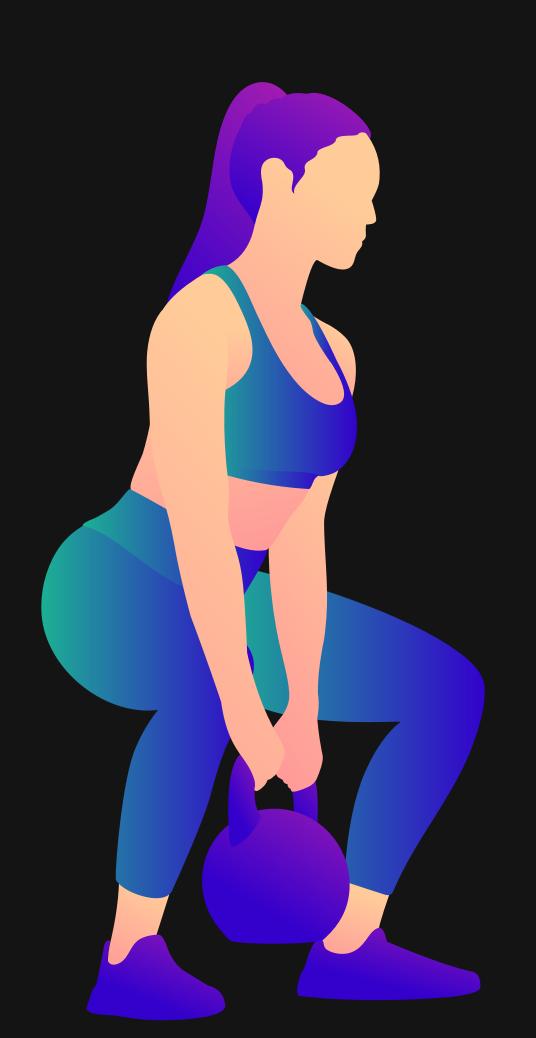
Using our high-fidelity
30+ point
skeletonization model,
Verum will sell
collected data to
companies like Fitbit
and Apple

Long Term: In-App Purchases and Extension Packages based on Athletic Level

## DISTRIBUTION CHANNELS



Target Independent and Consumer Gyms for early user adoption Develop technology for usage in Physical Therapy Offices, High-Performance Athletics, and At-Home Fitness Expand globally to target nations including Canada, United Kingdom, and Germany

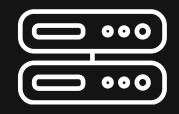


# FIGANCIAL DRIVERS

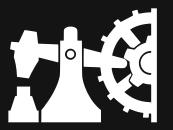
## COST DRIVERS



BACK-END & FRONT-END INFRASTRUCTURE



SERVER AND ANALYTICS INFRASTRUCTURE



HARDWARE MANUFACTURING



SALES & MARKETING

## REVENUE DRIVERS

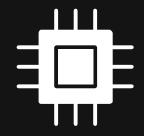
DATA BANK ANALYSIS & SALES



SOFTWARE AND ALGORITHM



SENSORS & ACCESSORIES



IN-APP PURCHASES



# 

## **Confirmed Gyms**



**Metfit Powerlifting Gym** 

Natick, Ma

## **Pipeline**



**TB12 Sports** 

Foxborough, MA



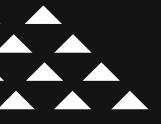
**Mauceri Private Fitness** 

Solon, OH



**InnerCity Weightlifting** 

Boston, Ma





WHY PARTNERS WANT VERUN

Gamification of working out leads to a more fun and engaged experience for their users

People who use the technology will have more bang for their buck due to the fitness tracking and movement optimization tools

Users are more likely to stay at their gym knowing that there are resources that help reduce their fear of getting injured

# Pilot Testing Experimentation

All Groups will test Deadlift, Bench Press, and Barbell Squat	Group 1 - Bodyweight at High Repetitions (Hypertrophy training)	Group 2 - High Volume (Strength Training)	Group 3 - 1 Repetition Max
Weight Levels	A weight the lifter Is confident they will get 20 repetitions	50,60,70,80,90, % of 1RM	1–3 rep warm ups of 50,60,70,80,90, and finally 100% 1RM
Repetition Ranges	12-20 Repetitions	3–5 Repetition at each weight	1-3 Repetitions at max possible weight
Info the Experiment Group will Provide	Find the point where form falls apart due to fatigue	Find the deterioration of form as Weight Increases	Find failure points In form, as they are most prominent during a Max Lift

#### **GOALS:**

- 1. DETERMINE POINTS OF FORM DETERIORATION BASED ON TYPE OF WEIGHTLIFTING ACTIVITY
- 2.VALIDATE

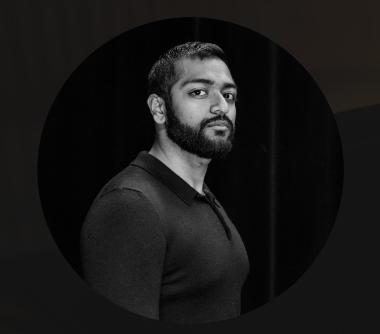
  SKELETONIZATION MODEL

  WITH REAL-TIME

  FEEDBACK
- 3.BETTER UNDERSTAND
  HOW USERS INTERACT
  WITH THE
  PRODUCT/ECOSYSTEM

# SERUM TEAM





RISHI NARAHARI B.S.B.A. in Finance-Miami University of Ohio Venture Capital Fundraising and Startup Finance



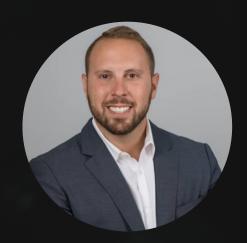
**SEAN SPERZEL** B.A. in Public Policy and Law- Trinity College Business Law and Division 1 & 3 Collegiate Athlete



**JACOB BOYER** B.S. In Information Science-University of Maryland Design and Data Analytics



SAMEER SHAIK B.S. in Supply Chain Management-Michigan State University Operations and Logistics



**BUSINESS DEVELOPMENT ADVISOR** Chief Innovation Officer of Light Efficient Design Founder of RemPhos TED Magazine's 30under35

**DAVID GERSHAW** 



**LEARNING** B.S. in Industrial Engineering-Northwestern University Neural Networks and Back-End Architecture

**DIRECTOR OF MACHINE** 

**VIKAS JAIN** 



**VENTURE ADVISOR** MBA from IESE Business School Fractional CEO of Root 2 Ventures Venture Investor at VU Venture Partners

# CITATIONS

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