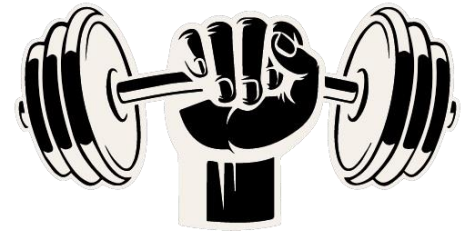


AmpuFitness



Fitness Through Tough Times



Problem

- **552.45** million amputees as of 2019 with **13.23** million new amputees annually
- **Mortality** after amputation goes up as high as **40%** in the first year, **65%** in three years, **80%** in five years.
- Over **30%** face depression, psychological morbidity, decreased self esteem, distorted body image, and significant levels of isolation



<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10622756/#:~:text=Globally%2C%20the%20incidence%20and%20prevalence,16.4%20and%2049.2%25%2C%20respectively.>

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10257952/#:~:text=Following%20amputation%2C%20mortality%20ranges%20from,in%20five%20years%20%5B13%5D.>

https://www.physio-pedia.com/Emotional_and_Psychological_Reactions_to_Amputation#:~:text=About%20%E2%89%A530%25%20of%20amputees%20are%20troubled%20by%20depression.

Fitness is a solution

- Life expectancy increases about **6.9** years if physically active
- Exercise thrice a week reduces **25%** all depressive episodes
- Increases oxygen levels in your body
- Reduce risk of heart diseases
- Manage blood sugar and insulin levels
- Weight loss
- Help sleep



<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9862474/#:~:text=A%20recent%20systematic%20review%20and,the%20depressive%20episodes%20%5B17%5D.>

[https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3395188/#:~:text=All%20studies%20reported%20a%20higher,%3A%203.9%20%C2%B1%201.8%20years\).](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3395188/#:~:text=All%20studies%20reported%20a%20higher,%3A%203.9%20%C2%B1%201.8%20years).)

How do you exercise with a
unique disability?



AmpuFitness

The first AI assistant designed for amputee
fitness

How it works:

- Asks you 14 questions to find out disability
- Trains AI RAG model based on answers
- Gives recommendations for specific physical disability exercises
- Can speak to the AI for more recommendations such as diet
- Complete Privacy

Front End: Next.js

Back End: Flask

Model Provider: OpenAI GPT 4

LLM-RAG Orchestrator: LlamaIndex

Operational database: MongoDB Atlas





Disabilities

What type of physical disability do you have?
Check everything you have from the list below.

- Lower Leg Disability
- Upper Leg Disability
- Toe Disability
- Arm Disability
- Finger Disability
- In a Wheelchair
- On Crutches
- Spinal Rotation Disability
- Other

Is your disability long term?

- Yes
- No

Does your disability cause pain with motion of other limbs?

- Yes
- No

Limbs

Which limbs are you able to move with minimal / no pain ?

Are you overweight?

- Yes
- No

Do you want to lose weight?

- Yes
- No

Would you say you are over eating?

- Yes
- No

Are you on a strict/medically prescribed diet?

- Yes
- No

Eating restrictions?

- Vegetarian
- Omnivore
- Gluten Free
- Vegan
- Low FODMAP
- Ketogenic

Continue



For a comprehensive workout, focus on strength, cardiovascular fitness, balance, and flexibility. Start with a 5-10 minute warm-up, including light cardio and dynamic stretches. For strength, incorporate squats, chest presses, single-leg deadlifts, seated rows, and plank variations (2-3 sets of 10-12 reps each). For cardio, choose low-impact activities like swimming, cycling, or walking (20-30 minutes). Balance and stability training can include single-leg stands, balance board exercises, and tai chi or yoga poses (10-15 minutes). Cool down with 5-10 minutes of light activity and stretching. Adjust exercises to your comfort and consult a healthcare provider. Aim for 2-3 sessions weekly, staying hydrated and refueling post-workout. Track progress and prioritize consistency.

Enter what are you looking for

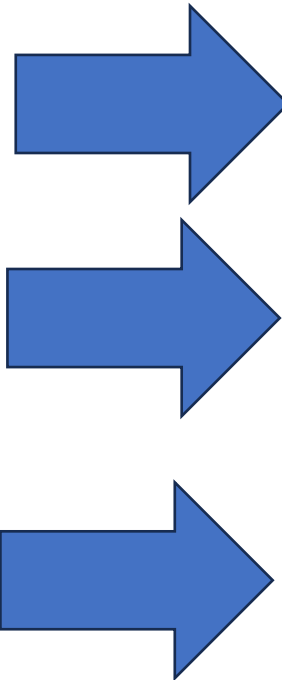
Business Model

Start with B2C Subscription model: \$20/month

Projected Startup Cost:
\$60,000

Marketing, Server costs, labor costs, first year utility costs, API fees

Projected Cost Per User:
\$5/user



Scale to B2B model as AI implementation agency working with Insurance companies and VHA

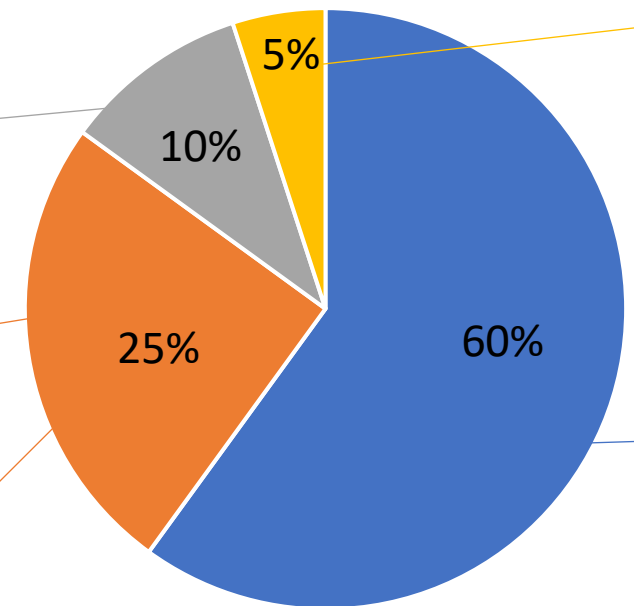
Scaled cost per user:
\$30/user

Marketing

Primary demographic: US citizens with little access to professional advice



Marketing Budget



- SEO
- Offline
- Influencer
- Social Media



Scaling

AI projected to grow exponentially

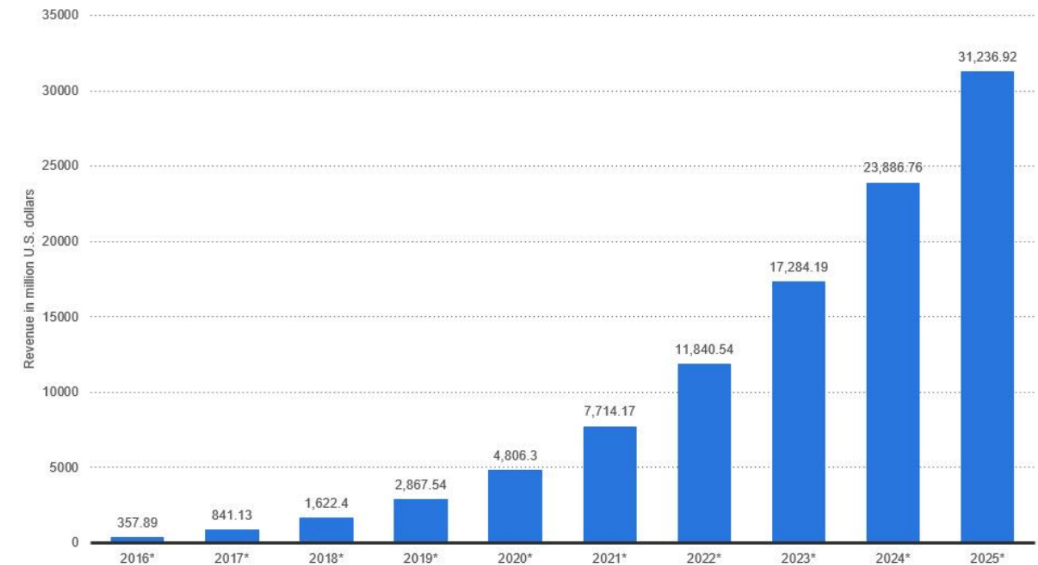
Companies invested billions in new implementations annually

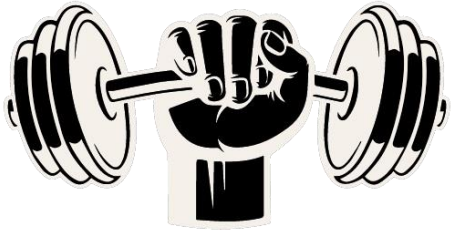
Future Features:

More personalized profiles for more comprehensive questions and deep learning

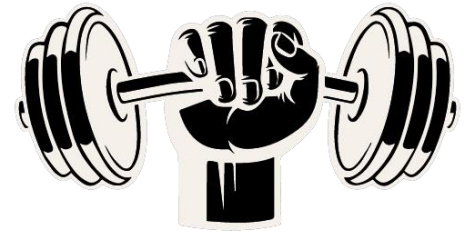
Images of fitness recommendations

Revenues from the artificial intelligence for enterprise applications market worldwide, from 2016 to 2025 (in million U.S. dollars)





AmpuFitness



Fitness Through Tough Times



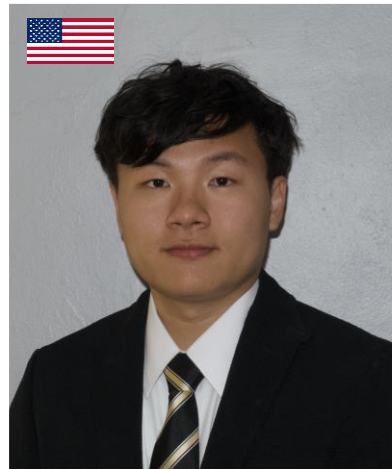
Meet the Team



Slavi Karashevov
Front End Engineer

15 year old
Prodigy

Software University
Graduate



Ernest Choi
Project Manager

Earnest3D LLC
Founder

Purdue University
Graduate



Kinh Quốc Phạm
AI Engineer

ARCHIVE Data
Scientist

Tokyo International
University Graduate



Roha Pathan
Software Engineer

Harvard CS50
Graduate

Usman Institute of
Technology Student