

4th INTERNATIONAL CONFERENCE ON
**AI ML, DATA SCIENCE AND
ROBOTICS**

NOVEMBER 28-29 | PORTO, PORTUGAL



Sahaj Vaidya

New Jersey Institute of Technology, Newark, New Jersey, USA

Personalized Health Optimization: An AI-Driven Approach

Abstract: Achieving optimal health through diet and exercise remains a complex challenge. This research proposes an AI-powered platform to deliver personalized nutrition and fitness recommendations tailored to individual needs and goals. By integrating a comprehensive dataset encompassing genetic information, health metrics, lifestyle factors, and dietary preferences, the platform will generate highly customized plans. Advanced machine learning algorithms will analyze these data points to identify intricate patterns and correlations, enabling the platform to optimize meal plans and exercise regimens. The platform will also incorporate features to track user progress, provide real-time feedback, and adjust recommendations based on evolving health data. Ultimately, this research aims to empower individuals to make informed health decisions, improve overall well-being, and potentially reduce the prevalence of chronic diseases.

Keywords: AI, personalized nutrition, exercise, health, machine learning, genetic data