

Advancements in Computational Genomics for Personalized Medicine

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Abstract. This article delves into recent advancements in computational genomics that are paving the way for personalized medicine. By leveraging high-throughput sequencing data and sophisticated algorithms, researchers can now identify genetic variations with unprecedented accuracy. These developments hold significant promise for tailoring medical treatments to individual genetic profiles.

Keywords: Computational Genomics, Personalized Medicine, Genetic Profiling, High-Throughput Sequencing, Genetic Variations

Introduction

The field of genomics has undergone rapid transformation due to advancements in computational techniques, particularly in the context of personalized medicine. This paper reviews the latest developments in computational genomics, focusing on their application to individual genetic profiling. By utilizing high-throughput sequencing and advanced algorithms, researchers have achieved remarkable accuracy in identifying genetic variations. These innovations are crucial for the development of personalized medical treatments, offering hope for more effective and targeted healthcare solutions.

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