# AI to detect Parkinson's disease symptoms via wearables: from detection to management to treatment

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## Abstract

Parkinson's disease (PD) is a progressive neurodegenerative disorder marked by motor and non-motor symptoms. Early detection and continuous monitoring are essential for effective management and personalized treatment. Advances in artificial intelligence (AI) and wearable technologies offer transformative opportunities for PD care. This session highlights the role of wearable devices, particularly STAT-ON, which is considered the "Holter monitor" for Parkinson's. STAT-ON stands out as the most effective tool for real-time, continuous symptom monitoring, capturing key motor fluctuations and providing comprehensive data on a patient's condition. Integrated with AI, these devices enable accurate detection of PD symptoms, from early diagnosis to symptom management and treatment optimization. By analyzing sensor data, AI models can predict disease progression, guide personalized interventions, and enhance remote patient care. This AI-driven approach, coupled with advanced wearables, represents a paradigm shift in PD management, offering the potential for better patient outcomes and a higher quality of life.

## Keywords

Parkinson's disease, Neurodegenerative disorders, Early detection, STAT-ON, wearable devices



*Italian Workshop on Artificial Intelligence for Human Machine Interaction (AIxHMI 2024), November 26, 2024, Bolzano, Italy*
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