ai·prognosis

Newsletter #11

November 2026

AI-PROGNOSIS -

Towards Parkinson's risk assessment and prognosis through AI

Newsletter highlights

- **Recent outreach and dissemination activities**
- **Knowledge base**
- **Quizzes**
- **Interview**

Learn more on **www.ai-prognosis.eu**

Funded by the European Union

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Scientific Publications

Recent research outputs from the AI-PROGNOSIS consortium

Rest Tremor and Dyskinesia Assessment in Parkinson's Disease Using Wearable Sensors

Chatzis T., et al. IEEE Internet of Things Magazine. 2026;9(5):63-71.
DOI: 10.1109/MIOT.2026.3703551

Read the full publication.

Key Milestones

AI-PMP Study Successfully Completes Recruitment

The AI-PROGNOSIS project has reached an important milestone with the successful completion of recruitment for the **AI-based Progression and Medication Response Prediction (AI-PMP) study**.

103

Participants recruited

The AI-PMP study is a **multicentre, proof-of-concept study** designed to validate AI models predicting **Parkinson's disease progression and medication response**.

It also aims to provide preliminary evidence of their clinical utility and evaluate the usability of the **mAI-Care** and **mAI-Insights** applications among people with Parkinson's disease and healthcare professionals.

With recruitment now complete, the focus moves to analysing the data collected during the study.

Learn more about AI-PROGNOSIS clinical studies.

Interviews

Perspectives on Parkinson's research, care and innovation

Prof. Leontios Hadjileontiadis on Homo sAIence: AI in health research

Can the way we type on a phone reveal signs of Parkinson's disease or depression? Can smartwatch data help predict psoriatic arthritis?

Prof. Leontios Hadjileontiadis (AUTH), coordinator of AI-PROGNOSIS and iPROLEPSIS, addressed these questions in episode 54 of **Homo sAIence**, **Voria.gr video podcast on artificial intelligence**. He spoke about AI-PROGNOSIS, which continues earlier work on how typing patterns on a phone differ in people with Parkinson's disease, and about iPROLEPSIS, which combines phone and smartwatch data, microbiome, environment and work status to study psoriatic arthritis.

Watch the interview in Greek on YouTube.



Interviews

Perspectives on Parkinson's research, care and innovation

AI-PROGNOSIS researcher Sara Riggare featured in Being Patient

A recent article published by **Being Patient,** a journalism-driven community platform focused on neurodegenerative diseases and brain health, features **AI-PROGNOSIS researcher Sara Riggare** from Uppsala University, who is also living with Parkinson's disease.

In the article, Sara discusses a recent study, supported by AI-PROGNOSIS, involving **149 people with Parkinson's across 19 countries**. Participants reported using AI-based tools in three main ways:

- to **seek information**, for example about Parkinson's medications and side effects;
- to **help interpret symptoms** and **health-related information**; and
- to **organise information** about medications and symptom timing ahead of healthcare consultations.

The article also discusses the limitations of these tools, including concerns about accuracy and privacy, and highlights the need for further research to understand when and how they may be useful. The study was published in the **Journal of Parkinson's Disease.**

Read the Being Patient article.

Knowledge Base

Educational resources from the AI-PROGNOSIS Learning Hub

Raising awareness about Parkinson's disease and the role of artificial intelligence in its diagnosis and care.

Articles

Insights on Parkinson's disease, artificial intelligence and related themes

Connecting with Others When Living with Parkinson's

Many people living with Parkinson's find it helpful to connect with others who have similar experiences – through local support groups, exercise classes or online communities.

Our latest Learning Hub article explores these opportunities across the **UK, Spain, Germany** and **France.** It is also available in German, French and Spanish.



Read the article.

Looking ahead, not back: how AI can help anticipate Parkinson's medication side effects

Finding the right Parkinson's medication is an ongoing balancing act, as effective treatment can also be associated with complications over time.

The AI-PROGNOSIS medication model estimates how likely a person is to experience dyskinesia, hallucinations or excessive daytime sleepiness for the first time within the next three years.



Read the article.

Quizzes

Test your knowledge of Parkinson's disease

User Needs for Digital Health Solutions in Parkinson's Disease

Take the quiz

Sleep and Parkinson's Disease

Take the quiz

See all quizes

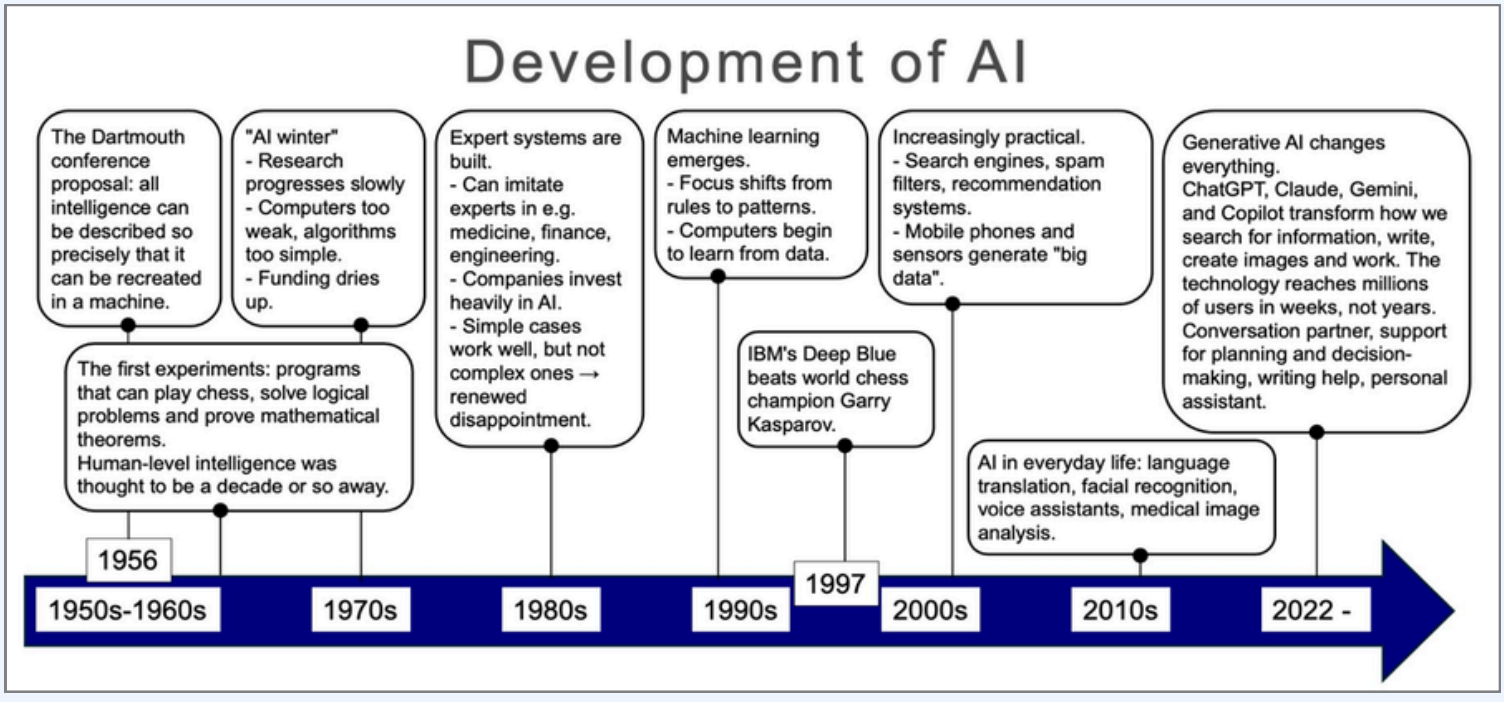
Infographics

Visual insights on Parkinson's disease and AI

From early concepts to today's AI

How artificial intelligence has evolved over time

Explore the infographic



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Clustering activities

Challenges, solutions, and strategic insights from four EU-funded projects

White paper: Trustworthy AI for Transformative Healthcare: Experience from Four European Innovation Projects

The white paper brings together insights from four EU-funded Horizon Europe projects, **SmartCHANGE**, **AI-PROGNOSIS**, **TRUSTroke**, and **UMBRELLA**, united by a shared focus on trustworthy artificial intelligence in healthcare.

Each project contributes a distinct perspective, from AI-driven NCD prevention in children and adolescents (SmartCHANGE) to Parkinson's disease prognosis (AI-PROGNOSIS), stroke management (TRUSTroke and UMBRELLA), yet all converge on the critical importance of building AI systems that are not only accurate, but transparent, ethical, and aligned with the needs of clinicians, patients, and families.

The paper also includes a market overview of the AI healthcare landscape, an analysis of barriers to entry, and reflections on strategic positioning for scaling trustworthy AI tools across diverse European healthcare systems.



Read the white paper.

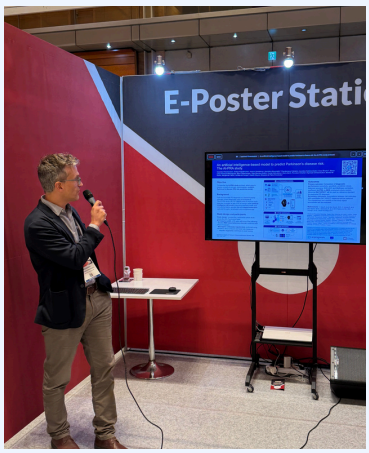
Events

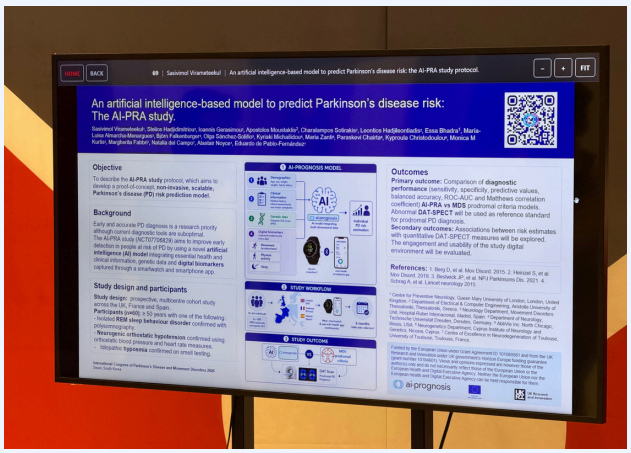
Recent outreach and dissemination activities

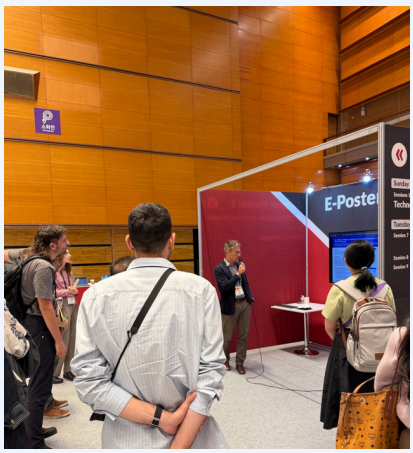
International Congress of Parkinson's Disease and Movement Disorders®

AI-PROGNOSIS was represented at the International Congress of Parkinson's Disease and Movement Disorders® (4–8 October 2026) in Seoul, Korea, where project partners presented work from several areas of the project.

Eduardo de Pablo-Fernández (Queen Mary University of London) presented the poster **"An artificial intelligence-based model to predict Parkinson's disease risk: The AI-PRA study"**, providing an overview of the AI-PRA study, which aims to create a proof of concept for the AI-based Parkinson's disease detection model the project is developing.

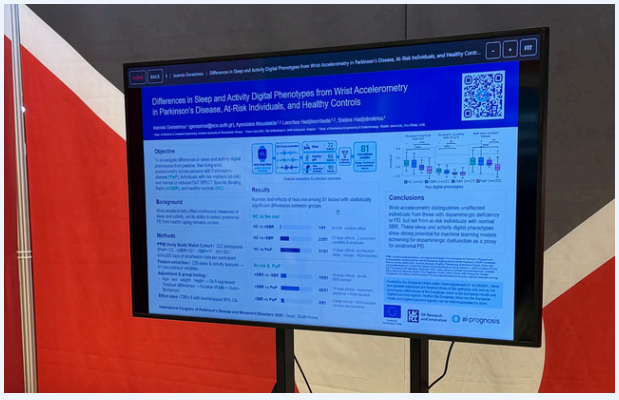






Ioannis Gerasimou (Aristotle University of Thessaloniki) presented the poster **"Differences in Sleep and Activity Digital Phenotypes from Wrist Accelerometry in Parkinson's Disease, At-Risk Individuals, and Healthy Controls"**, providing initial evidence on wearable-based sleep and activity metrics that could be used for screening persons at risk of Parkinson's disease.







Kosmas Dimitropoulos (Centre for Research & Technology Hellas – CERTH) presented the poster **"Smartphone video derived digital motor phenotypes of MDS UPDRS-related tasks via a comprehensive motor function test"**, providing an overview of the initial results from the smartphone camera-based body-tracking approach developed by the project for the assessment of motor function in Parkinson's disease.





Björn Falkenburger (Technische Universität Dresden) presented the work **"Smartwatch actigraphy for detection of REM sleep behavior disorder: the dBM-DEV study"**, providing an overview of the dBM-DEV study and its findings on the use of smartwatch-captured motion data to detect REM sleep behaviour disorder, a key non-motor symptom of Parkinson's disease, under free-living conditions.





Natalia del Campo (CHU de Toulouse) presented the poster **"AI-based Progression and Medication Response Prediction in Parkinson's Disease: the AI-PMP Study Protocol"**, providing an overview of the AI-PMP study, which aims to create a proof of concept for the AI-based Parkinson's disease progression and medication response prediction models being developed by the project.





Margherita Fabbri (CHU de Toulouse) gave a talk on early/prodromal Parkinson's disease as part of a session focusing on under-recognized non-motor aspects of the disease and how prodromal stages can vary between individuals.

The congress also provided opportunities for networking and scientific exchange with researchers and experts in the field.











EUSIPCO 2026

AI-PROGNOSIS took part in **EUSIPCO 2026** (31 August – 4 September 2026) in Bruges, Belgium, where the project organised the special session **"Digital Biomarkers for Chronic Diseases"**, co-chaired by Christos Chatzichristos from KU Leuven. The conference was attended by AI-PROGNOSIS team members Stelios Hadjidimitriou and Ioannis Gerasimou from AUTH, and Christos Chatzichristos, Fan Wang and Maarten De Vos from KU Leuven.

Two AI-PROGNOSIS works were presented during the session.

The first study, **"Assessment of Fine Motor Skills Impairment in Parkinson's Disease Using Touchscreen Typing Dynamics: a Multi-Cohort Analysis"** by Gerasimou et al., leveraged the timing of key-tap events during touchscreen typing to compute a digital score that strongly correlates with a clinical measure of finger movement slowness in people with Parkinson's disease (PD). Slowness of movement, or bradykinesia, is one of the cardinal motor symptoms of PD. The team presented early evidence of the score's generalisation and test-retest reliability in a sub-cohort of the AI-PROGNOSIS dBM-DEV study (NCT06444789), where participants contributed free-living, routine typing data.

The second study, **"Permutation-Invariant Multi-Night Actigraphy for the Screening of REM Sleep Behavior Disorder"** by Wang et al., leveraged free-living wrist-acceleration data collected over multiple nights in the AI-PROGNOSIS dBM-DEV study (NCT06444789) to develop a machine learning model capable of distinguishing people with REM sleep behaviour disorder (RBD) from unaffected individuals. RBD is a sleep condition characterised by dream enactment and an early sign of Parkinson's disease. The team compared different machine-learning classifiers and observation windows, while also exploring the movement characteristics during sleep that may serve as proxies of RBD.





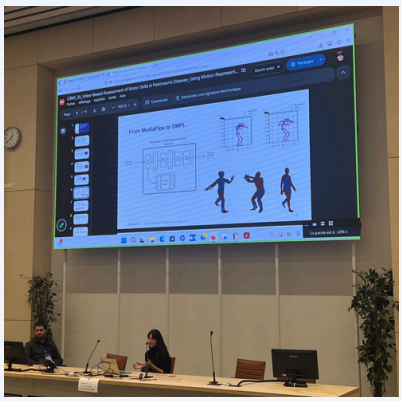


Events

Recent outreach and dissemination activities

IEEE CBMI 2026

AI-PROGNOSIS partner CERTH presented the study **"Video-Based Assessment of Motor Skills in Patients with Parkinson's Disease using MotionGPT Motion Representations"** by Georgali et al. at IEEE CBMI 2026 (21-23 October 2026) in Toulouse, France.



The study explores an automated, video-based approach to motor skill assessment in Parkinson's disease, combining pose estimation, body modelling and pretrained motion representations to predict clinically relevant motor scores.

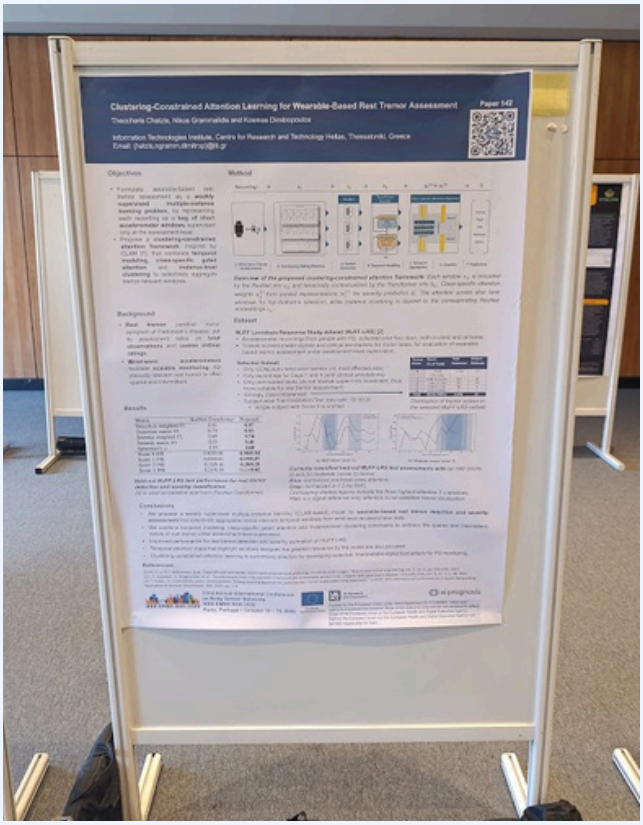
IEEE EMBS BSN 2026

AI-PROGNOSIS partner CERTH presented the paper **"Clustering-Constrained Attention Learning for Wearable-Based Rest Tremor Assessment"** by Chatzis et al. at the 22nd Annual International Conference on Body Sensor Networks (IEEE EMBS BSN 2026) (10-12 October 2026) in Porto, Portugal.

The work focuses on wearable-based assessment of rest tremor in Parkinson's disease using a machine-learning approach that combines clustering constraints with attention learning.

Read the paper.





The South East European Innovators Challenge



AI-PROGNOSIS partner **SquareDev** participated in the **South East European Innovators Challenge (SEEIC)** 2026 (16–17 September 2026) in Niš, Serbia. SEEIC is a regional innovation event focused on AI and cybersecurity, bringing together selected startups and innovation teams with technology companies, research organisations, investors and representatives of the Southeast European innovation ecosystem.

SquareDev showcased its activities and AI solutions and presented AI-PROGNOSIS, raising awareness of the project's work among stakeholders from across the region.

SEEIC 2026 was held as part of the 10th Forum of Advanced Technologies and featured startup presentations and pitches, networking opportunities and B2B meetings designed to foster new partnerships and collaboration.

AI-PROGNOSIS presented at Seoul National University Hospital

During an international research visit on 7 September 2026 to **Seoul National University Hospital (SNUH)**, AI-PROGNOSIS was presented to researchers in nursing informatics and computer science at the Human-Centered AI Lab (HCAIL).

The presentation highlighted the project's work on Parkinson's disease, self-care, patient participation and AI-supported health technologies, with discussion also focusing on the importance of incorporating user perspectives into the design and implementation of digital health solutions.

The visit provided an opportunity to exchange ideas and explore future collaboration between European and Korean research communities.



Upcoming events



