

Matching the experts: New AI system proves adept at diagnosing eye problems

A new machine-learning system is as good as the best human experts at detecting eye problems and referring patients for treatment, say scientists.

The groundbreaking artificial intelligence system, developed by the AI-outfit [DeepMind](#) with Moorfields eye hospital NHS foundation trust and University College London, was capable of correctly referring patients with more than 50 different eye diseases for further treatment with 94% accuracy, matching or beating world-leading eye specialists.

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The two-stage AI system takes a more human-like and intelligible approach to analysing the highly complex [optical coherence tomography](#) (OCT) scans of patient retinas.

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The referral decisions are combined into one result, with a confidence rating expressed as a percentage. The maps and any differing or ambiguous results can be shown visually to a clinician for their own interpretation and explanation of the referral result. Most other AI-based systems essentially appear as a black box; data is fed in one end and the result is outputted from the other, with no way to check how the system came to its decision.

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The next stage is to put the AI system through clinical trials and regulatory approval before it can be used in hospitals for patient referrals.

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Experts said AI systems such as those created by the researchers had the potential to help clinicians treat more patients and make the NHS's limited resources go further.

Read full, original post: [Artificial intelligence tool 'as good as experts' at detecting eye problems](#)