

# The Park Bench

The Monthly Newsletter of the  
Guildford and South Surrey Branch of Parkinson's UK

## Happy November,

Welcome to the latest edition of *The Park Bench*, the monthly newsletter of the Guildford and South Surrey Branch of Parkinson's UK.

I thought it would be helpful to start by reiterating the communication process we use as a committee to keep you, our members, informed.

The primary communication is *The Park*, a multi-page magazine issued three times a year—January, May, and September—which provides various articles and notes the activities we plan to carry out over the following four months.

The second layer of our communication strategy is *The Park Bench*, this newsletter, which is issued at the beginning of each month. In it we provide information on the activities intended for the coming month, a bit of amusement (*my ramblings!*), and share any important news happening in the wider world.

Finally, we have ad-hoc communication, where we send out urgent information on a specific activity or event.

We aim to keep communications to a minimum so as not to overwhelm your inbox or post box with too much information. This is very much a two-way street, and we kindly ask that you take the time to read these communications, which take considerable effort to produce.

In line with the above please find the key activities, events and updates for November:

- **Thursday 7 Nov - Chair Based Yoga** classes re-start at the Conservative Club, Oxborough Room, 2nd Floor (lift), 11 Wharf Street, Godalming. GU7 1NN
- **Saturday 16 Nov** - We will be fundraising at the Vivace Chorus “**West End Extravaganza**” at GLive. They still have spaces available for this concert so please come along and watch this great show. It would be good to see some friendly faces!



- **Tuesday 3 Dec - Branch Christmas Lunch** –at Broadwater Pavilion, Godalming. There is still time to reserve your places for this heavily subsidised festive meal. Contact Steve our Treasurer [sheron@GuildfordParkinsons.org.uk](mailto:sheron@GuildfordParkinsons.org.uk)

For those of you who enjoy ‘the ramblings of a madman’, you will know that I typically base the story on a topic, even if I only vaguely stick to it. To avoid writers block I follow a tried and tested process. During the early part of the month, I attempt to identify what I am going to write about and then I spend the latter days trying to find tangential angles. Usually, I get the spark of an idea based on how I'm feeling, what I've learned, and what has amused me. This month I thought I'd look at **technology**.

### Let's start with a question - What is this....

As a starter I'd like to introduce you to the following item. Can you guess what it is and what real-world problem it attempts to solve?

A second clue is some believe the technology within it could destroy humanity?



#### Still no idea?

Anonymised data is collected by the German company that developed it which shows that it stopped 719 incidents today (23rd October).

While these incidents never make national news, many incidents lead to fatalities and nearly always lead to major inhouse crisis.

### Before I give you the answer, a second question - would you be able to diagnose a Person with Parkinson's?

The following 30 images are spirals drawn by healthy and People with Parkinson's (PwP). Like myself you may well have drawn these spirals at each of your neurology appointments. Can you spot the 5 drawn by PwP?



## The Answers.... Let me introduce you to ZeroMouse.

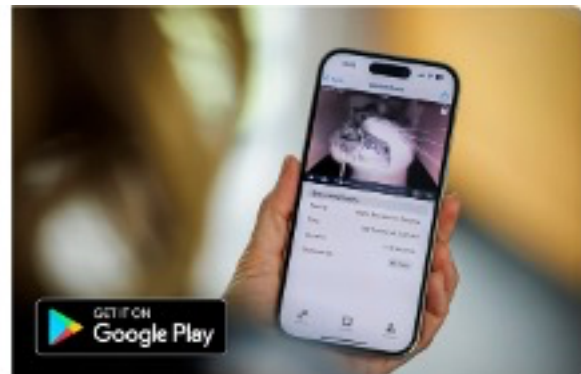
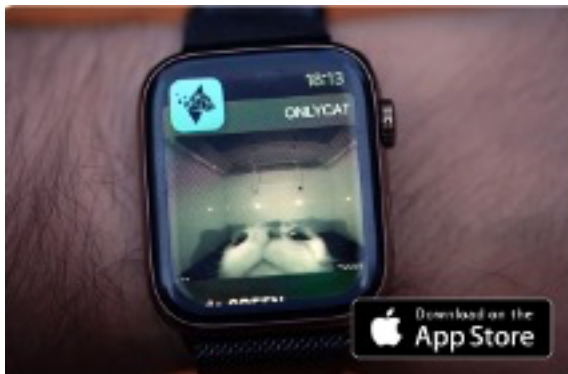


For those of us with Cats the default cat flap technology is microchip recognition. Effectively, the cat flap reads your cat's microchip and allows access only to those that match.

This might stop the neighbourhood Tom from entering to spray or eat your cat's food but what happens if your cat is a mouser wanting to impress you with his/her latest killing!

The answer is the ZeroMouse add-on. Effectively the ZeroMouse takes a photo of your cat and then uses **AI** to determine if your cat is alone or carrying a gift. It can allegedly distinguish mice, rats, birds, snakes etc. If the cat is alone then the flap releases otherwise it remains shut.

Other similar solutions are available many of which provide you real-time video to your phone or watch.



## A more serious application of the technology...

The cat flap is an example of Machine learning, a subset of artificial intelligence (AI) where systems learn from data to improve performance without being explicitly programmed. Machine learning revolves around pattern matching, where algorithms process data to detect trends and relationships. These systems learn from vast datasets, identifying patterns. As the model processes more data, it continuously refines its accuracy, adapting and improving over time.

While its use in Cat Flaps could be considered a bit of fun, the underlying technology is a game changer for medical advancement. As documented on the official government website (<https://www.gov.uk/government/case-studies/using-ai-to-diagnose-parkinsons-and-speed-up-future-research>) AI (Artificial Intelligence)-enabled diagnosis could accelerate Parkinson's research by months and possibly years.

The article states

*“Accurate diagnosis and grading from brain tissue after death is necessary to more fully research and understand pathological causes and develop potential new treatments. However, brain changes can only be assessed manually, and the time required – 4 to 6 hours – is hindering the speed and scale of research into causes and potential new treatments.*

*This work enabled the Research team to go on to develop a proof of concept classifier which achieved around a 92% accuracy hit rate on automatically classifying Parkinson’s from digitised images of brain sections, with no false alarms – remarkably close to a perfect score. Applying this process meant moving from assessing one brain in 4 to 6 hours to minutes, which allows neurologists to focus on more complex cases. The quality of the tool is approaching viability for real-world applications.”*

## **Does it work?**

If you need further proof, you will have seen earlier the 30 images are spirals drawn by healthy and People with Parkinson’s

The AI machine learning can identify those with Parkinson’s from the general public with near perfect results. Can you? I’ll make it easier by telling you there are 5 People with Parkinson’s and 25 from healthy people.

The answer is the 5 are marked with red borders.

**Have a great November**

**Regards, David**

