

Application No. 103: Villain with Gigahertz

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A magnetic field measurement on your own laptop reveals amazing things...

Online Banking has its perils, as we know. But thanks to modern encryption techniques, those nasty hackers, phishers and other dark figures no longer have it so easy. In actuality the biggest danger is found within your own four walls!

Patiently she lies in wait until the careless user leaves his bank or credit card within reach. And in the blink of an eye, all information has been deleted from the magnetic strip, never to be recovered, and without anybody noticing a thing.

At least not until the moment when you stand helpless and confused before the automatic teller, or have to enter your place of work in a less than dignified manner because your badge doesn't work anymore :-((

The villain waits hidden in your laptop or Apple's version, the MacBook, in the form of strong, built-in magnetic fields.

Recently magnets have been implemented in the hinged cover of laptops to hold them closed, or to arrest the power connector. Then there are a few other magnetic sources which are difficult to allocate without seeing the inside of the laptop.

It is therefore definitely a bad idea to bring your bank or credit cards close to your "post-diskette-generation" laptop or even lay them on top! Transporting your laptop in a backpack or laptop bag should also be well planned to ensure that your laptop doesn't come into contact with your wallet (and the cards within) by mistake.

The magnetic fields have a very local impact due to the alignment of the poles, but the impact is all the stronger if you happen to put something too close.

Required Materials:

- flux detector (www.supermagnete.nl/eng/M-04)
- steel spheres (www.supermagnete.nl/eng/K-13-N)

The magnetic fields can be easily located using a flux detector (www.supermagnete.nl/eng/M-04). But you can also find them using more rudimentary methods, for instance with a steel sphere (www.supermagnete.nl/eng/K-13-N), a simple paper clip or with other appropriate household items.



Using iron filings or ferrofluid is, for obvious reasons, not recommended. :-)



Articles used

1 x M-04 (www.supermagnete.nl/eng/M-04)

1 x K-13-N (www.supermagnete.nl/eng/K-13-N)

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