MCH2022 is a nonprofit, outdoor, hacker camp that took place in Zeewolde, the Netherlands, July 22 to 26, 2022. The event is organized by and for volunteers from the worldwide hacker community. Knowledge sharing, technological advancement, experimentation, connecting with hacker peers, and hacking are some of the core values of this event. MCH2022 is the successor of a string of similar events that have taken place every four years since 1989. These are GHP, HEU, HIP, HAL, WTH, HAR, OHM and SHA. [https://mch2022.org/](https://mch2022.org/)

**DAY 0 • 7-21-2022 Thursday**

Today is mostly about packing things and traveling up to Zeewolde where MCH 2022 is about to begin. I arrived in the afternoon and after checking in, I picked up my cardboard tent which will be my new home for the coming week. I met most of the village “Frubar” which I will be part of. I got my badge working, but after some updates (yes, Wi-Fi was up in the late evening), the Python apps don’t want to run. Dinner was a pizza salami which I bought at the food corner. After some drinks, it was time to go to bed.

**DAY 1 • 7-22-2022 Friday**

A coffee (thanks Frubar!) and a shower made me feel human again, after which I started typing the first bits of this trip report. Today, the uplink for the Ethernet arrived, providing almost gigabit speeds.

I visited some of our “remote” village members who had their camper with them and consequently were in the camper area. Today was the official first day, but I missed the opening talk because we were busy setting up the UbaBot (admittedly, I mostly watched, as it took quite some preparation to get it up and running).

This “bot” is an automated cocktail making machine, from which you can select and enjoy various pre-programmed cocktails, given that you feed it the right ingredients, of course. You can find more about this machine on the Internet.

Evening shows are planned after the talks and workshops, but today I stayed in the village tent and played a few rounds of Uno with some fellow villagers.
**DAY 2 • 7-23-2022 Saturday**

Today I visited some talks and workshops: a talk by Karsten Nohl on hacking 5G networks with OpenRAN, a KiCad workshop about designing (but not actually making) PCBs, and a workshop on programming the camp badge.

Things never go as planned, Karsten’s talk was somewhat during lunch time and therefore overruled. At Frubar, lunch did not consist of a quick sandwich. Some people in the village were quite enthusiastic about the grill we brought, so we decided to have grilled steak for lunch this week.

Regarding the KiCad workshop, I found myself trying to set up the Espressif IDE in a Ubuntu chroot under FreeBSD and getting communication with the badge up and running. The badge comes with some Python script for file manipulation, which did work in the end.

I arrived at the badge workshop in the DNA tent, which was already filled to the brim, but I managed to find a seat and the fellow sitting next to me and I experimented with the badges together.

The workshop was targeting the embedded Python that the badge runs. Their tutorial included a program to draw random lines which turned out to run fine.

After the workshop, I wandered back to base. Later in the evening, I stumbled upon a performance of the Ambrassband that the organization had scheduled. Live brass music on-stage.

**DAY 3 • 7-24-2022 Sunday**

I didn’t plan many talks or workshops for today, however, today was also Tor day. I attended the Tor talk by Alexander Færøy and the unofficial Tor relay operator meetup in the evening.

After lunch, I went to the exhibition of the Home Computer Museum in the retro tent and finally played Duckhunt after all these years. I also had a chat with a guy from the museum about, well, old computers ;) . Later that evening, some of us went to visit the party at the silent disco, after saying hello to the folks at the Geraffel tent, who also had a small party.

**DAY 4 • 7-25-2022 Monday**

I attended some talks today: one about Tesla cars and the security of its keys/phone app by Martin Herfurt, one about reporting vulnerabilities by the Dutch Institute for Vulnerability Disclosure (we watched this on the big screen in the village tent), a talk about separate audio without physical walls by Adrian Lara Moreno (also in the tent — the demo didn’t work out I guess), and drscream’s talk about Illumos zones.

I also went to the Area 42 Workshops, which was mostly just a small tent set up as a classroom to watch the talk about making a drone out of the camp badge (or how it failed).

I stayed at the village tent this evening (sorry Symphony of Fire show) and played some more Uno.
Day 5 • 7-26-2022 Tuesday

Today is the last day of this event and apparently the time when all camps start to pack up after breakfast. This is also the day that my temporary home will be recycled by the company that sells them to MCH, so I’d better pack up too.

I had some events scheduled, but those were overruled because of saying goodbye to those in the Frubar group who were also heading home.

One last thing: I need to have the sound selection switch of my badge replaced by one with a knob to grab, as the old knob mysteriously broke off, perhaps during the workshop on Saturday.

Back Home • 7-27-2022 Wednesday

I woke up in my apartment and realized there was no more steak for lunch :(.

Back home, I restored the regular ‘rene’ user on my laptop and registered the badge on my home Wi-Fi.

Some firmware and application updates came in (everything works again ;) ), it now runs OS version 1.4. Under FreeBSD, it shows up as:

ugen0.5: <Badge.team MCH2022 badge> at usbus0
umodem0 on uhub0
umodem0: <ESP32 console> on usbus0
umodem0: data interface 1, has no CM over data, has no break
umodem1 on uhub0
umodem1: <FPGA console> on usbus0
umodem1: data interface 3, has no CM over data, has no break

The RP2040, which connects the ESP32 to the USB port and knobs, is unlisted. The next event will be held in 2025, but next year a sibling event will be held in Germany. Almost all videos are available at [https://media.ccc.de/b/conferences/camp-NL/mch2022/](https://media.ccc.de/b/conferences/camp-NL/mch2022/)

René Ladan studied computing science at the Eindhoven University of Technology where he graduated in 2006. He has worked at various companies, including the university itself. He currently works as a software engineer at Carapax IT.

When not doing BSD stuff and still in nerd mode, he likes to tinker with his homebrew time station receivers. Outside of technical things, René likes to hike, puzzle, and work in his parents’ garden.