

BSDCan 2025

BY CHRISTOS MARGIOLIS

This year, I gave a talk at [BSDCan 2025](#) titled "[Vox FreeBSD: How sound\(4\) works](#)". I arrived in Montréal on June 9, two days before the conference, but did not do much that day except rest.

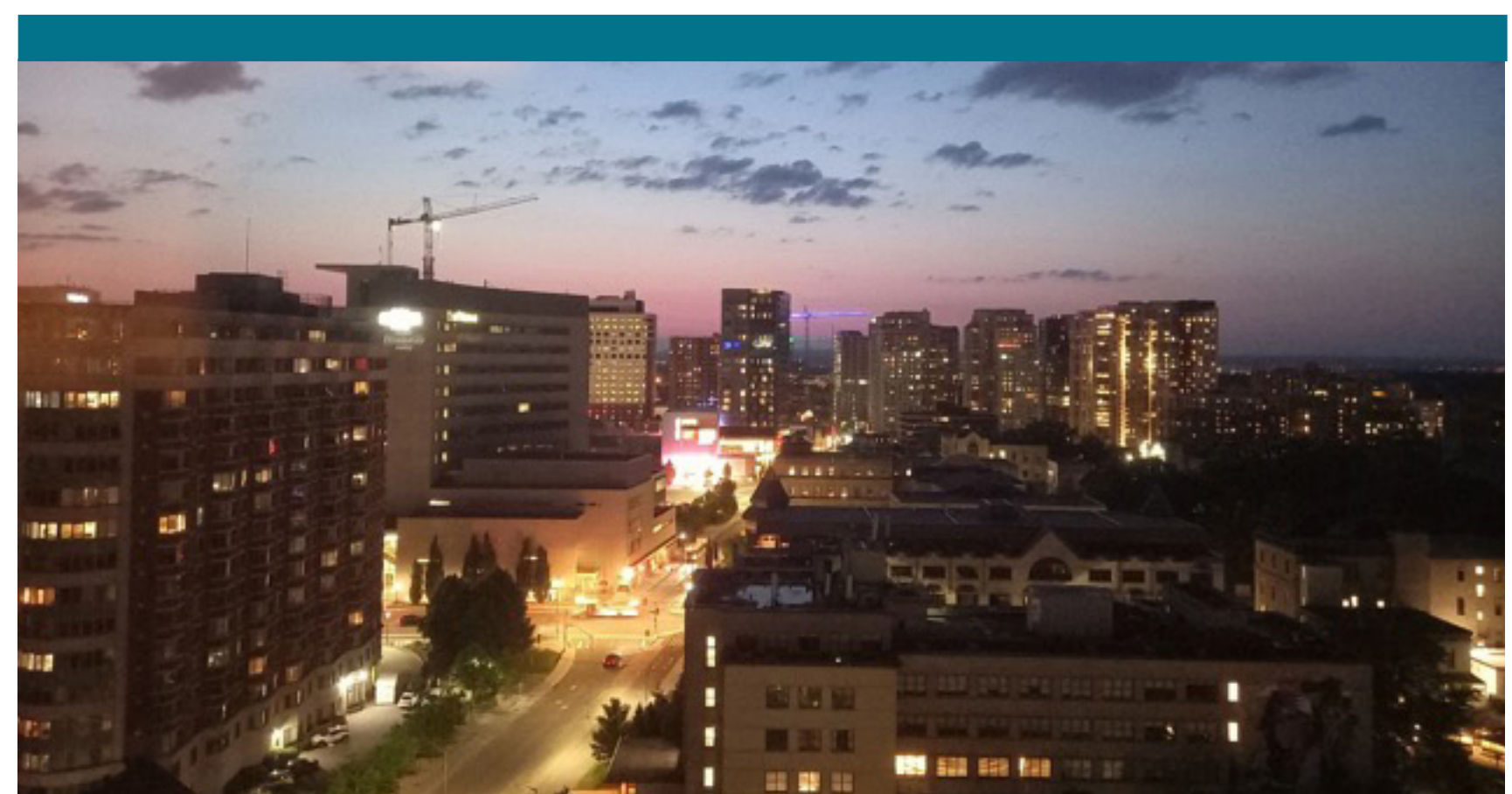
The next day, June 10, I took the bus from Montréal to Ottawa, where the conference is held. As soon as I got off the bus, I randomly stumbled upon Olivier Certner (olce@), who was walking by, and we went for lunch at a restaurant near the University of Ottawa — the venue and speaker residence — before checking in. In the evening, I met with Mateusz Piotrowski (Omp@), Bojan Novković (bnovkov@), and Kyle Evans (kevans@) for beers and dinner at Father & Sons Restaurant. In this common meeting place, we also met with other people from the conference.

The first two days of the conference (June 11 and 12), for me, were spent at the [FreeBSD DevSummit](#).

A highlight of the first day was the public discussion initiated by the Core Team, regarding AI usage on FreeBSD, which also continued during the breaks. The Core Team seemed to focus on the licensing concerns of mostly AI-generated code. My position, however, was that we should be *hardline against any use of AI*, primarily because of ethical and quality concerns. I find the licensing aspect of the AI question to be secondary in nature and relatively unimportant when compared with questions such as: Do we want to actively participate in possibly making the world a worse place? What kind of people will we attract to the project if we adopt a relaxed AI policy? How will this affect the quality of the project long-term? Do we really *need* AI and the complexity that comes with it? If licensing weren't a problem, would there be no problem in using AI? And many more questions... The good thing was that many people (some hesitantly) seemed to support my opinion.

I also had discussions, both technical and non-technical, with Mark Johnston (markj@), Joseph Mingrone (jrm@), Bojan, and Charlie Li (vishwin@), the latter of whom I did not know was also interested in FreeBSD audio/music production, and actually does DJ sets using it.

After the first day of the DevSummit, we headed for pizza at the university residence, but I retired to my room relatively early to do some work and get my slides done.



The second day of the DevSummit, June 12, started with a talk from AlphaOmega on security auditing, followed by a discussion about [FreeBSD 15.0 technical planning](#), including PkgBase. After lunch break, Brooks Davis (brooks@) gave a fascinating talk — probably my favorite technical one throughout the DevSummit — on upstreaming the [CheriBSD](#) branch. Even though the talk was about upstreaming, he also took the time to give an excellent overview of what CHERI, CheriBSD, and capabilities are, and how the built-in memory safety feature manages to catch various bugs in the FreeBSD code. Then, the [FreeBSD Foundation](#) gave an update on recent work and funding, including the [Laptop Support and Usability Project](#), which I am a part of. Speaking of laptops, towards the end of the DevSummit, I spent some time with Alexander Ziaee (ziaee@), who has been working hard on improving documentation, and attempted to debug a sound issue on his laptop. In the evening, I met with Benedict Reuschling (bcr@) and a few other people and went for dinner at a nice seafood restaurant.

BSDCan took place on June 13 and 14. It started with a keynote speech from Margot Seltzer, a famous computer scientist, about [Hardware Support for Memory-Hungry Applications](#).

I attended many talks during those two days, but a few that stood out for me include:

- [ShengYi Hung: ABI stability in FreeBSD](#). He showcased his new experimental tool, which detects ABI changes based on differences between CTF data. Then followed an interesting discussion, including me, Mark Johnston, John Baldwin (jhb@), Warner Losh (imp@), and the speaker, about the limitations and oversights of this tool, and how to use it in real-world scenarios.
- [Marshall Kirk McKusick: A History of the BSD Daemon](#), as well as an update on the upcoming third edition of *The Design and Implementation of the FreeBSD Operating System*. I always enjoy Kirk's presentation style.
- [Bojan Novković: Hardware-accelerated program tracing on FreeBSD](#). He presented his recent work on the hwt(8) framework.
- [Zhuo Ying Jiang Li: Improvements to FreeBSD KASAN](#). She gave an overview of KASAN, FreeBSD's kernel address sanitizer. She presented her work on it as part of her involvement with CheriBSD.

A few talks I would like to have attended, but didn't manage to:

- [John Baldwin: ELF Nightmares: GOTs, PLTs, and Relocations Oh My](#).
- [Andrew Hewus Fresh: The state of 3D-printing from OpenBSD](#).
- [Hans-Jörg Höxer: Confidential Computing with OpenBSD — The Next Step](#).
- [Andreas Kirchner, Benedict Reuschling: Enhancing Unix Education through Chaos Engineering and Gamification using FreeBSD](#).

I gave my talk on June 14, the last day of BSDCan. It sparked lots of questions and conversations, which continued even after the talk. Apparently, there are more people than I thought who would really like to be able to use FreeBSD for music and audio production

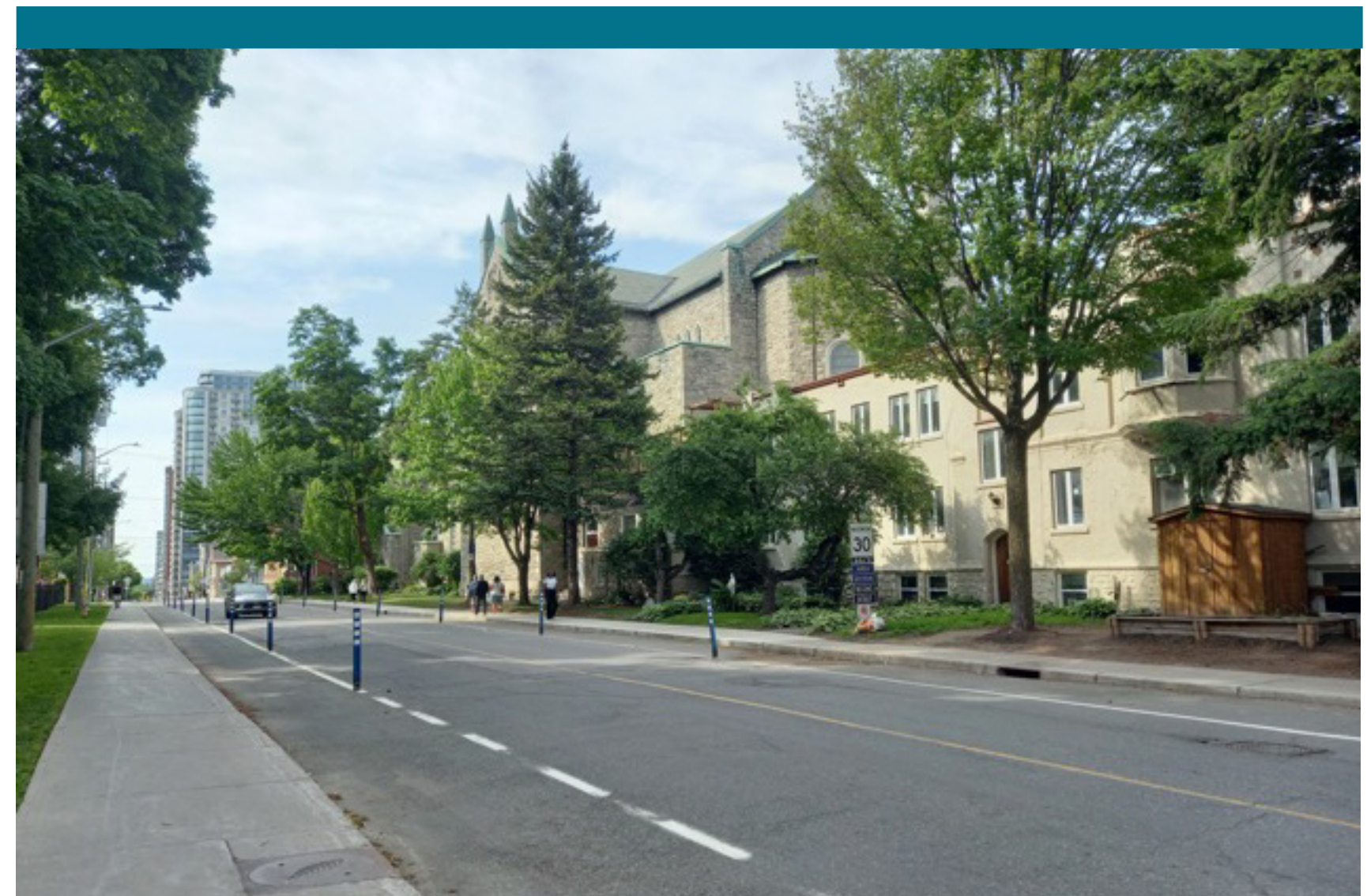
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or in large audio installations, so the talk seemed to have inspired some of them, which is excellent.

After the conference's Closing Session, we headed to a nearby market square for the social event. I spent most of my time with Mark Johnston, Andreas Kirchner, and Mateusz Piotrowski, and had many interesting conversations.

The next day, I went back to Montréal to enjoy some days off before my return home.

As always, conferences are great opportunities to make up for the solitary nature of programming and meet with the people behind the screens with whom we exchange emails every day. Apart from the fact that we got work done and exchanged interesting technical ideas, what I enjoyed even more was the unexpected, deep discussions I had with people, including people I had never met before.



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