It’s been almost a year since the nascent GNU poke [1] got first introduced to the public at the GNU Tools Cauldron 2019 in Montreal. We have been hacking a lot during these turbulence months and poke is maturing fast and approaching a first official release, scheduled for late summer.

In this talk we will first do a quick introduction to the program for the benefit of the folk still unfamiliar with it. Then we will show (and demonstrate) the many new features introduced during this last year: full support for union types, styled output, struct constructors, methods and pretty-printers, integral structs, the machine-interface, support for Poke scripts, and many more. Finally, we will be tackling some practical matters (what we call "Applied Pokology"[2]) useful for toolchain developers, such as how to write binary utilities in Poke, how to best implement typical C data structures in Poke type descriptions, and our plans to integrate poke with other toolchain components such as GDB.

<b>About GNU poke</b>

GNU poke is an interactive, extensible editor for binary data. Not limited to editing basic entities such as bits and bytes, it provides a full-fledged procedural, interactive programming language designed to describe data structures and to operate on them.