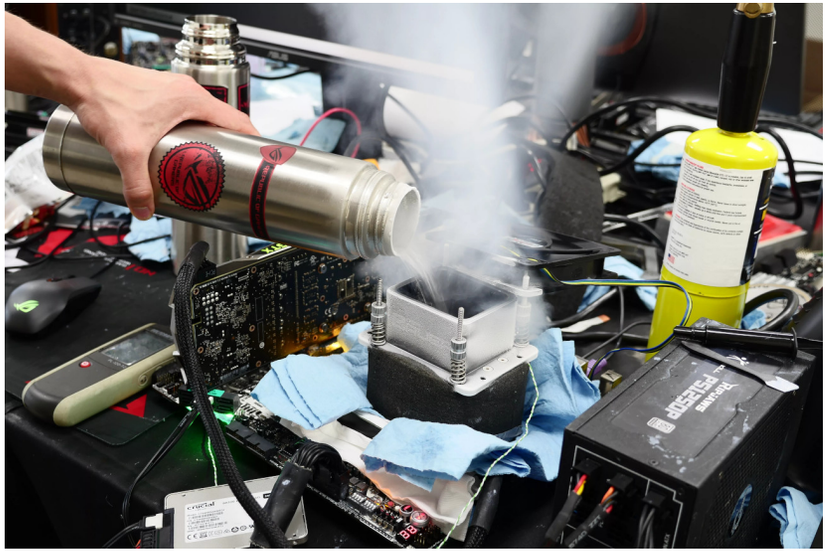

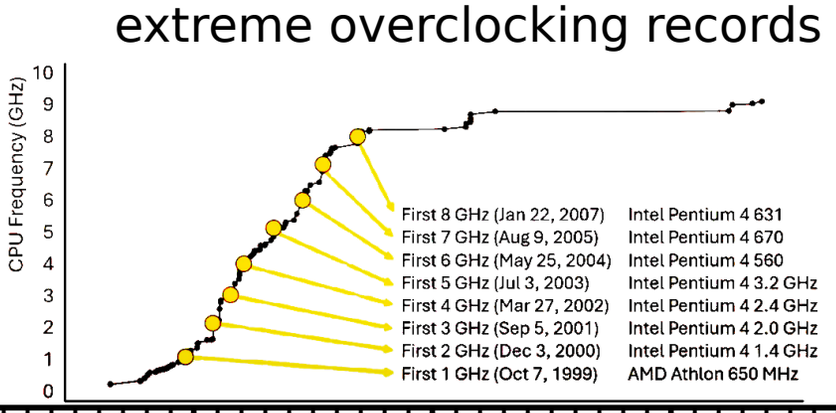

1950 1960 1970 1980 1990 2000 2010 2020 2030

“just get it working”

- Early exploration: what can computers do for us?
- Specialized applications for business and science.
- Mostly assembly language.

“generalize it”

- Distributing software for personalized computers and the web, need portability.
- High-level languages, particularly object-oriented.

“make it fast”

- Data analytics of web-sized datasets.
- Deep learning becoming effective in business and science.