# Ice

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## Skills

- **Tools:** GDB, CMake, GNU Make, Git, GNU Emacs
- **Languages:** C, C++, Python, HTML, CSS, Javascript, x86_64 Assembly, Bash
- **Other Relevant information:** Custom Linux Kernel, Self Hosted services, Publishing and maintaining a package on AUR

## Education

**Random University**, Computer Science and Engineering                                Year-begin – Year-end

## Open-Source Experience

**GNU Emacs (Code Editor)**                                                            Commit: 46b6d1
- Fix bug where extraction of compressed elisp code failed when using pigz
- Bug caused by inappropraite gzip stream end checking

**TLP (Laptop Power Management Utility)**                                              Commit: 9f3ff4
- Fix startup failure in TLP in certain environments (busybox)
- Bug caused due to using non-portable options for POSIX utilities

## Projects

**FORTH86**                                                                           x86_64 assembly, CMake
- FORTH programming language implementation in x86_64 assembly
- Builds upon libx86
- FORTH86 is an implementation of forthress (Low Level Programming, Igor Zhirkov)

**sinkhole (wip)**                                                                    C++, C, x86 assembly, Make
- Operating System Implementation from scratch
- Core kernel: C++, x86 assembly | libc: C
- Future goals: hybrid microkernel with focus on performance

**perfmode**                                                                          C, Make
- A linux CLI tool for ASUS TUF Laptops, controlling fan modes and LEDs
- Writes different integral values to files exposed by the kernel module.

**mister8**                                                                           C, Raylib, Raygui, CMake
- Third iteration of my chip-8 emulators/interpreters
- Graphics and audio were implemented using Raylib
- Tested with the standard timendus' chip8 test suite

**c8fontgen**                                                                         C, Raygui, Raylib, CMake
- Tiny pixel editor for generating custom chip-8 fonts
- Supports Light and Dark themes

**telegram discord bridge**                                                           Python, telethon, discord.py
- A unidirectional bridge written using Python
- Uses a regular discord bot and a telegram user account
- Intended for cross-posting and scraping