Nadjib Ferhat

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First year Computer Engineering student at [University of Science and Technology Houari Boumediene](). Has strong interest and passion for **UI/UX design**, **graphics programming**, and **Linux**

Education

University of Science and Technology Houari Boumediene *Sept 2024 - June 2025*
First year in Computer Engineering
- **Coursework:** Calculus, Algorithms and Data structures, Operating System Engineering, Computer Architecture.

Lycée International Alexandre Dumas 🔗 *June 2024*
High School Degree
- **Final average:** 15.88/20.0
- **Coursework:** Mathematics, Physics, Philosophy, Frecnh language and literature.

Projects & Experiences

Fennec Linux Hackathon *Nov 2024*
USMT *Algeria, Saida*
- Automate the build of a Linux-From-Stratch distribution, with the possibility to configure different aspects of it through a user-friendly interface.
- Work on deploying said distribution, *Fennec Linux* to systems in administrations, classrooms, and other places such as smart university campuses, using tools such as Ubuntu MAAS.
- Achieve first place the second youngest participant.

Wayland Compositor ⌗ *nferhat/fht-compositor*
- Developed a custom graphical environment to suits my needs in order to achieve a keyboard-centric workflow where using the mouse is not as necessary.
- Publish and support users that try to use it via issue-tracking and pull requests on GitHub.
- **Tools used**: Rust, Wayland, OpenGL, C, Nix.

Top-Down math expression parser
- Wrote a math expression parser and evaluator, allowing the user to enter and get a result that's evaluated with respect to PEMDAS.
- Supports Unicode codepoints for expression evaluation: $\sqrt{x}$, $\pm\infty$, and variable names: $\alpha, \beta, \gamma, ...$
- **Tools used**: Rust.

friends-gpt
- Small-scale chatbot AI trained on a dataset made of 1 million messages from conversations between me and my friend group.
- **Tools used**: Python, PyTorch, Shell scripting (for scraping and filtering data).

Ideathon *Dec 2024*
MicroClub *USTHB*
- A two week long online hackathon where teams of seven group up and coordinate making a startup idea
- Learned 3d design and coordinated with my team to design and prototype a digital bracelet made for tracking children.
- **Tools used**: Blender

Skills

Programming languages: C, Rust, Bash, Nix, Lua, Python.
Tools/Libraries: OpenGL, WGPU, Nix (Package Manager), Shell Scripting, GTK, Figma, Blender.

Volunteering

Leadership role: Presented myself to be the the section delegate during my first year as a Computer Engineering student, being the spokesperson relaying complaints and suggestions from 170 students in my section, aswell as keeping them updated on the latest documents, reschedules, and other key information provided by the administration and professors.

Community management: Helped to managed a small-scale study group with the help of my middle school administration in order to help eight and ninth grade students share study resources (like mock exams, additional work sheets) and maintain rules to ensure that nothing go wrong between students.

Languages

Arabic: Native speaker, fluent.

French: Native speaker, fluent.

English
- Acquired language, fluent in speaking and writing.
- 7.5 IELTS score 🔗