SuperSmell: A Revolution in Olfactory Analysis

Portable, Powerful, and Practical

The device reads smells from a 4x4 array of gas detectors. These gas detectors contain wires of different materials that change resistance in the presence of different gasses. The data from the detectors is sent through a neural network to map voltage patterns to specific smells.

Smell Sensors

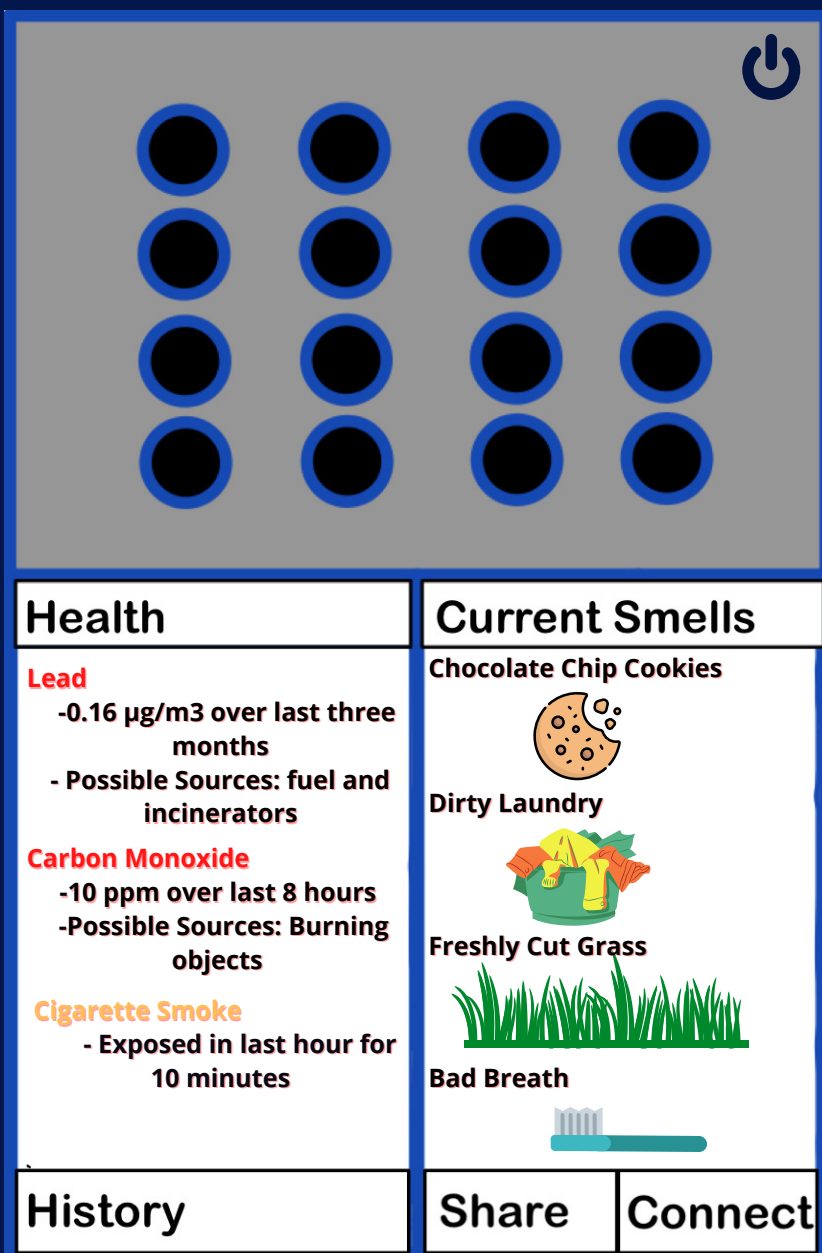**Buzzer**
Alerts user of health threats

Health Tab
The heath tab gives the user up-to-date information on the health hazards that they have been exposed to recently, in order of priority.

Power Button
No data is collected while the device is powered off.

History Tab
The history tab displays a list of smells encountered while the device was on. History can be deleted.

Current Smells Tab
The current smells tab displays smells currently in the area.

Health

Lead
-0.16 µg/m3 over last three months
- Possible Sources: fuel and incinerators

Carbon Monoxide
-10 ppm over last 8 hours
-Possible Sources: Burning objects

Cigarette Smoke
- Exposed in last hour for 10 minutes

Current Smells

Chocolate Chip Cookies

Dirty Laundry

Freshly Cut Grass

Bad Breath

History

Share **Connect**

Share Tab
The share tab allows one to share one's current smells on various social media platforms.

Connect Tab
The connect tab allows one to view the smells that other people are smelling, if they have allowed them to be viewed.

Designed to enhance experience, protect physical wellbeing, and connect users on a deeper level to others

WHAT IS SUPERSMELL?

SuperSmell is an AI-driven, smell identifier that can accurately classify over 1000 smells. Until now, gas detectors have been used for a narrow range of use cases, mainly in home safety devices. SuperSmell both expands on and augments the traditional gas detector by harnessing and analyzing the vast amount of data output by these devices. SuperSmell uses 16 different detectors which allow it to exponentially extend the number of gasses it can detect. SuperSmell is more than just a smell classifier; it is a revolution in the senses that promises to connect us more deeply to ourselves and to others. We connect through to the world through our senses. SuperSmell connects the user to their sense of smell and thus opens up a new world of experience. Like the telescope expanding our conception of the universe, SuperSmell will expand our conception of our environment. SuperSmell is designed for social use by providing methods of sharing with others. Users will be able to participate in a global network of anonymous smell sharing.

WHO IS SUPERSMELL FOR?

- SuperSmell is designed for personal use. SuperSmell promotes personal flourishing by helping users understand and interact more deeply with their environments. The current smells tab shows the user the smells currently detected in their environment. The history tab allows the user to track the smells they have been exposed to over time. With the share and connect tabs, users can show others what they are smelling and see what others are smelling. Different features can be added and removed to allow users to use the device as they see fit.
- SuperSmell is designed for professionals. SuperSmell promotes professional flourishing by protecting the health of individuals exposed to toxic materials regularly. Miners, wastewater workers, semiconductor manufacturers will have up to date information on the hazards they are exposed to in the Heath tab so that they can better protect themselves and prevent future health problems. SuperSmell provides information on the smells it detects, the severity of the health threat, and methods of mitigation to allow users to effectively respond. A buzzer alerts the user when a particularly hazardous gas is detected. For professional users, features like the share and connect button can be removed for easier use.

WHY?

SuperSmell is designed to make the user feel connected with their environment.

USER MANUAL

1. The device is turned on by clicking the power button in the top right corner.
2. The user can interact with 5 tabs on the screen of the device
   a. Current Smells Tab: The current smells tab provides a list of the current smells in the user's environment. Common smells can be filtered out. Smells can be sorted by uniqueness or smelliness. Smelliness sorting will allow the user to mitigate unpleasant odors in their area.
   b. Heath Tab: The health tab provides a list of the harmful smells the user was exposed to recently. The color of the header tells the user the severity of the health hazard (yellow is minor, orange is medium, red is major). The tab also provides the level of exposure and possible sources of the smell. When a smell is particularly severe, the device's buzzer alerts the user to exit the area.
   c. History Tab: The history tab provides a list of all smells the user was exposed to while the device was on. History can be toggled on and off to allow for privacy. History can also be deleted. History is not shared with anyone and is only stored locally on the device.
   d. Share Tab: The share tab brings up options for the user to share to different social media sites and also for the user to share to SuperSmell's global anonymous smell space.
   e. Connect Tab: The connect tab brings up a globe that the user can move around to see smells from different areas of the world that users have shared. These smells remain anonymous.
3. Maintenance and physical use:
   a. The device has a portable metal casing that makes it easy to carry around in one's pocket.
   b. The device's smell sensors are protected from physical debris by a mesh.