

Product Name: *ViperRing* – “Strike Back at AI Surveillance”

Company Name: *PrivAI*

### **Concept & Function**

The ViperRing is a futuristic AI-powered wearable designed to empower users by actively detecting and countering AI-driven data tracking. This smart ring functions as a personal AI firewall, alerting users when their data is being collected and offering tools to cloak, scramble, or ethically monetise their digital footprint.

The wearable integrates real-time AI tracking detection, privacy shielding, data cloaking, and user-controlled AI interaction management into a sleek, modern accessory. It provides haptic feedback and LED signals when AI systems attempt to manipulate user decisions, track their behaviour, or extract personal data. Users can activate "Stealth Mode" to confuse trackers with decoy data, view AI-driven recommendations transparently, and even monetise their data ethically through an integrated app.

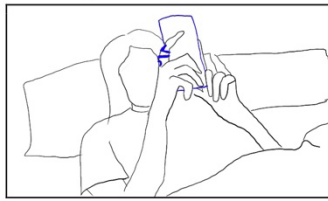
### **Example Scenarios of Use**

1. When scrolling through TikTok, the ViperRing detects AI-driven emotional tracking based on hormonal levels and delivers a brief vibration followed by the flashing of the red LED light. A subtle notification is displayed on the paired app: “Your emotional response is being recorded to shape future content recommendations.” The user can activate “Stealth Mode” or exit the app.
2. The user can activate “Stealth Mode” or exit the app. While shopping on Amazon, the ring activates “Stealth Mode” and vibrates twice, alerting users that the mode has been automatically activated. The user can manually disable “Stealth Mode”, however, the app does not recommend this. “Stealth Mode” will automatically turn off once the user exits the app.
3. During a YouTube binge, the ring continuously vibrates for five seconds to indicate a cumulative emotional profiling event. A message reads: “Platform is compiling your recent watch patterns to refine psychological targeting.” The user can activate “Stealth Mode” or exit the app.
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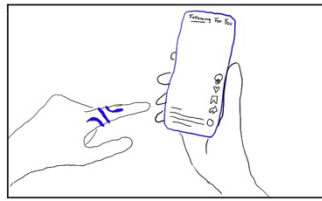
# Design Statement Assignment 2 - 22359923

## STORYBOARD

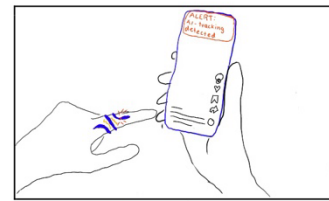
SHEET #01	SCENE #	PRODUCTION: CS4358: Interactive Multimedia „ViperRing“	DATE:
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Setting: User scrolling through TikTok in bed while wearing the ViperRing

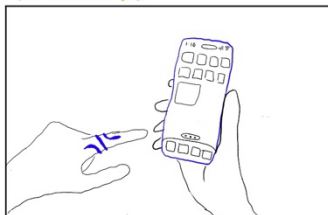


Setting: User continues to scroll through TikTok



Setting: ViperRing detects AI-tracking and alerts user via app notification, ring vibrations and a flashing red light

### VERSION A:

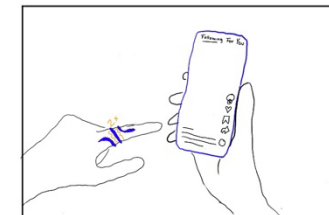


Setting: User exits app as the ViperRing notification made them realise the consequences of their behaviour

### VERSION B:



Setting: User opens the ViperRing app to activate Stealth Mode



Setting: User continues to scroll through TikTok after ViperRing vibrates twice, indicating Stealth Mode has been successfully activated

Figure 1 - Storyboard of a user using ViperRing

The user can customise the vibration and LED light cues to their preference. This will help reduce physical cues if a user feels overwhelmed by the ViperRing. Furthermore, ViperRing is designed to provoke reflection rather than disruption. When alerts occur, users are encouraged to pause, question, and optionally act, whether that means continuing with awareness, switching apps, or enabling “Stealth Mode.” The ring acts as a gentle interrupter in the digital flow, empowering users to resist passive consumption and regain agency over their data interactions.

ViperRing acts as a critical commentary on AI surveillance capitalism, transforming invisible data extraction into an interactive and tangible experience. By turning AI privacy into a wearable consumer product, this project questions the ethics of AI-driven consumer tracking while aligning with contemporary tech fashion trends.



Figure 2 - Open-Source Version

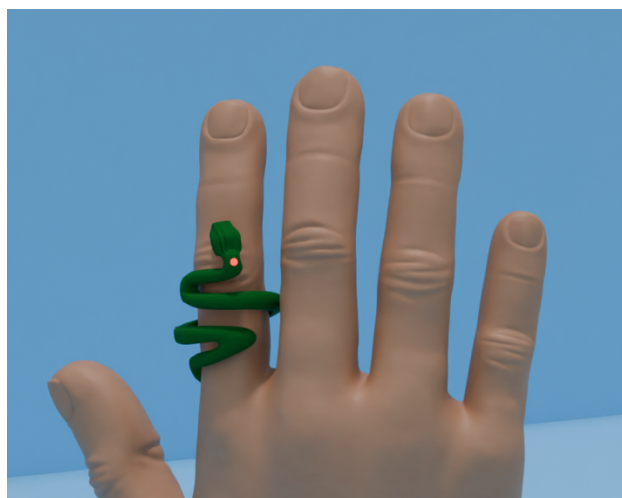


Figure 2 – Modified Version

## **Critique**

The ViperRing critiques the unseen power of AI in shaping consumer behaviour by making algorithmic surveillance visible in real-time. Traditional AI-powered marketing operates in the background, subtly guiding decisions through data-driven targeting. By providing users with instant feedback on when and how AI influences them, the ring shifts the power dynamic, allowing consumers to reclaim autonomy over their data.

It also challenges the ethical implications of AI-driven advertising. Instead of allowing corporations to exploit user data for profit, ViperRing lets individuals decide how their data is used, fostering a more ethical AI economy.

Furthermore, the ring's snake-inspired design adds an additional layer of meaning. The snake is both a protector and a symbol of awareness, aligning with the wearable's role in defending against AI surveillance while also exposing its presence.

While the ViperRing offers empowerment, it also introduces new tensions. Users may experience fatigue if alerts are too frequent, especially in high-interaction environments. In some cases, users might ignore the ring's signals, highlighting a paradox of digital convenience vs. ethical discomfort. These tensions reflect real-world behaviours, where awareness of surveillance doesn't always lead to resistance, and privacy tools must balance functionality with user tolerance.

## **Link Between Assignment 1 & Assignment 2**

In Assignment 1, my AI-generated video highlighted the unconscious data sharing that occurs when users interact with AI platforms. It visually represented how AI constructs digital identities by passively harvesting user data, creating an AI doppelgänger that knows everything about the individual. The video's unsettling conclusion forces viewers to question how much control they actually have over their digital selves.

Building on this critique, Assignment 2 transforms these abstract concerns into a physical, interactive product. The ViperRing provides a tangible response to the problem exposed in the video—it moves from raising awareness about AI-driven surveillance to offering a tool that actively counters it. While the video left audiences with an open-ended question about digital privacy, the ring presents a potential solution, reinforcing the same themes in a different medium.

Both assignments explore the power imbalance between AI and consumers, making invisible AI processes visible and interactive while prompting users to rethink their role in AI-mediated spaces.

### AI Tools & Methods Used in Product Creation

To design the ViperRing, I employed various AI tools. ChatGPT helped refine the concept into a marketable product. For prototyping, I used Maker World and Bambu Studios to explore open-source 3D ring models. After selecting a model, I imported the STL file into Blender, adding a button to power the ViperRing, an LED that flashes red if AI tracking is detected, a USB-C charging port, and sensors that vibrate upon tracking detection to the model. ChatGPT designed social media strategies, ad concepts, and interactive AR filters, creating a comprehensive branding campaign. Throughout the process, I followed an iterative design approach, brainstorming wearable privacy devices, refining designs through 3D-modelling prototypes, and integrating AI-based branding strategies to make the ViperRing both functional and marketable. I also used Canva to mock up filters and AR effects described by ChatGPT.

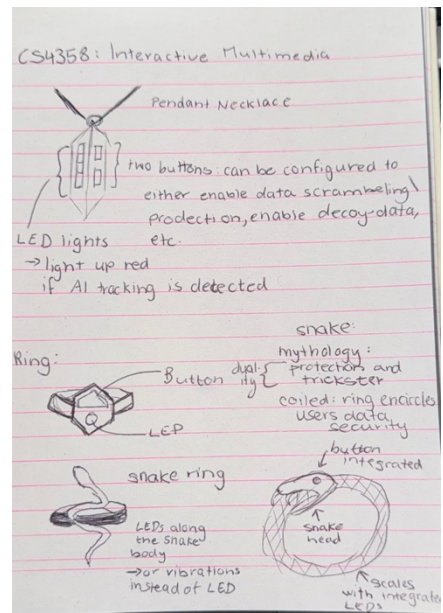


Figure 3 - Mock Up of 'Data Cloak' Filter enabled

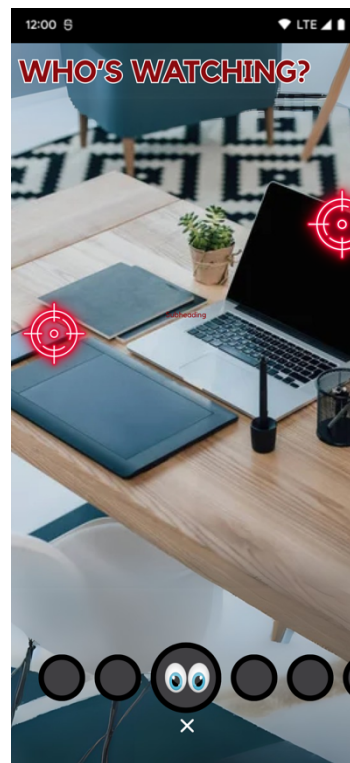


Figure 4 - Mock Up of AR Effect 'Who's watching'

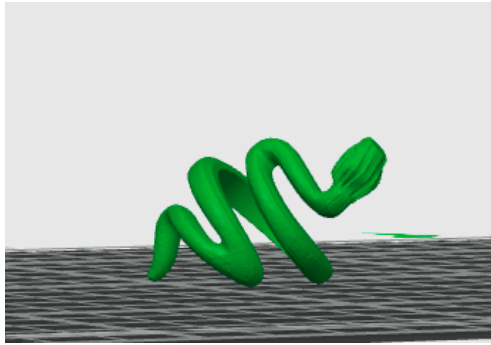


Figure 3 - 3D Model in Bambu Studio

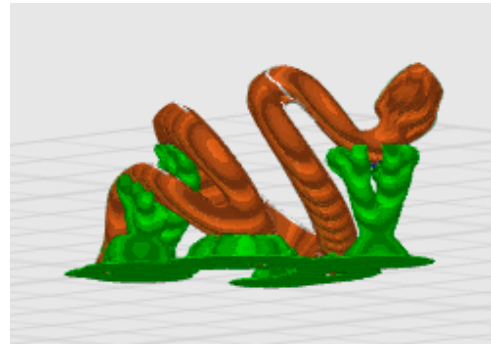


Figure 4 - 3D Model with supports for Printing

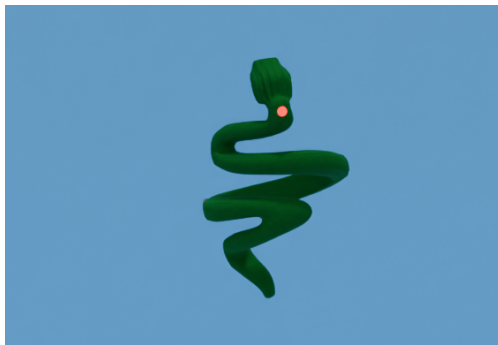


Figure 5 – Modified 3D Model in Blender

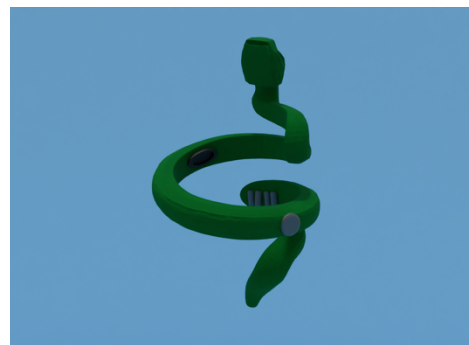


Figure 5 – Modified 3D Model in Blender

To push the speculative narrative further, I explored packaging design such as a minimalist black box with silver foil detailing and a warning sticker: “This device may change how you see your phone forever.”, legal disclaimers such as a satirical EULA that warns: “May cause discomfort through awareness. Use only if ready to see AI manipulation in action.” And lastly, brand extensions by adding materials like a printed user manual styled as a cyber-survival guide, and cautionary labels such as “Emotion Detector Active” printed on wearable cases or charger docks.

## Conclusion

The ViperRing is not a commercial product. It is a critical intervention into AI-driven retail culture. It is a speculative design fiction intended to provoke thought. It highlights AI’s invasive role in marketing and surveillance while simultaneously demonstrating how AI-powered tools can be repurposed to protect and empower users instead of exploiting them.

By transforming AI from a passive influencer into an active tool for resistance, the ViperRing challenges the norms of AI-driven commerce and offers a speculative yet functional vision of AI-enabled consumer empowerment. ViperRing invites users to reconsider their passive roles in digital ecosystems. By making surveillance visible, the design encourages more conscious interactions with technology. This project is an imaginative tool to challenge the normalisation of AI data extraction and provoke questions about consent, awareness, and control.