

Freeform Interactive Laser Ablation using Virtual Reality

Please make sure you have understood and signed both the *Declaration of Consent* and the *Declaration of Consent for the Storage of Personal Data for Research Purposes* before filling out this form.

About you

1. Age _____
2. Gender _____
3. Dominant Hand
 - ☐ Left
 - ☐ Right
4. Do you require any optical aid?
 - ☐ No
 - ☐ Yes, _____
5. Are you wearing any right now?
 - ☐ No
 - ☐ Yes, _____
6. Do you have any impairment in color vision?
 - ☐ No
 - ☐ Yes, _____
7. Do you have any impairment in spatial perception?
 - ☐ No
 - ☐ Yes, _____
8. Do you have any motor impairment?
 - ☐ No
 - ☐ Yes, _____

Pre-study questions

- 9a. Do you have any prior experience with VR applications or games?
None ☐—☐—☐—☐—☐ Daily use
- 9b. Have you used computer-based VR headsets before? *Examples for such devices are Oculus Rift, HTC Vive, etc.*
Never ☐—☐—☐—☐—☐ Daily use
- 9c. Did you enjoy the experience?
Not at all ☐—☐—☐—☐—☐ Very much
- 9d. Have you used smartphone-based VR headsets before? *Examples for such devices are Samsung Gear VR, Zeiss VR ONE Plus, etc.*
Never ☐—☐—☐—☐—☐ Daily use
- 9e. Did you enjoy the experience?
Not at all ☐—☐—☐—☐—☐ Very much
- 9f. Have you used standalone VR headsets before? *Examples for such devices are Oculus Go, or the Lenovo Mirage Solo.*
Never ☐—☐—☐—☐—☐ Daily use
- 9g. Did you enjoy the experience?
Not at all ☐—☐—☐—☐—☐ Very much
- 9h. Do you have any prior experience with laser ablation?
None ☐—☐—☐—☐—☐ Daily use

Condition before the study

- | | |
|--------------------------------------|--|
| 10a. How tired do you feel? | Not at all <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> Very |
| 10b. How concentrated are you? | Not at all <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> Very |
| 10c. How motivated are you? | Not at all <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> Very |
| 10d. Do you have a headache? | Not at all <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> Very |
| 10e. Do you have dry or aching eyes? | Not at all <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> Very |
| 10f. Do you feel nauseous? | Not at all <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> Very |

Post-study questions

Please read the questions carefully, some are formulated in a affirmative way, some are not.

Condition after the study

- | | |
|--------------------------------------|--|
| 11a. How tired do you feel? | Not at all <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> Very |
| 11b. How concentrated are you? | Not at all <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> Very |
| 11c. How motivated are you? | Not at all <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> Very |
| 11d. Do you have a headache? | Not at all <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> Very |
| 11e. Do you have dry or aching eyes? | Not at all <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> Very |
| 11f. Do you feel nauseous? | Not at all <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> Very |

General Questions

- | | |
|---|--|
| 12a. The visualisation had a high fidelity. | Not at all <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> Very |
| 12b. The visualisation was well-positioned in space. | Not at all <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> Very |
| 12c. The visualisation had a good scale relative to the user. | Not at all <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> Very |
| 12c. The software felt responsive to my inputs. | Not at all <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> Very |
| 12d. Being in an isolated VR environment irritated me. | Not at all <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> Very |
| 12e. I had trouble orienting myself. | Not at all <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> Very |
| 12f. I would have liked a different input/control method. | Not at all <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> Very |
| 12g. The usage felt very natural and intuitive. | Not at all <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> Very |
| 12h. I had to keep track of too many things at once. | Not at all <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> Very |
| 12i. The visualisation of information supports me in performing the task. | Not at all <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> Very |
| 12j. I was put off by the prototype character of the software. | Not at all <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> Very |
| 12k. I needed a long time to learn how to use the software. | Not at all <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> Very |
| 12l. The interaction felt very precise. | Not at all <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> Very |

Adoption Questions

- | | |
|--|--|
| 13a. I could imagine adopting the presented technique for my experiments. | Not at all <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> Completely |
| 13b. The presented technique provides an improvement over current techniques. | Not at all <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> Completely |
| 13c. The presented technique would allow me to perform experiments faster. | Not at all <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> Completely |
| 13d. The presented technique would allow me to perform experiments more precisely. | Not at all <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> Completely |

Task Load Questions

- 14a. How mentally demanding was the task?
Very Low ☐—☐—☐—☐—☐—☐—☐—☐ Very High
- 14b. How physically demanding was the task?
Very Low ☐—☐—☐—☐—☐—☐—☐—☐ Very High
- 14c. How hurried or rushed was the pace of the task?
Very Low ☐—☐—☐—☐—☐—☐—☐—☐ Very High
- 14d. How successful were you in accomplishing what you were asked to do?
Perfect ☐—☐—☐—☐—☐—☐—☐—☐ Failure
- 14e. How hard did you have to work to accomplish your level of performance?
Very Low ☐—☐—☐—☐—☐—☐—☐—☐ Very High
- 14f. How insecure, discouraged, irritated, stressed, and annoyed were you?
Very Low ☐—☐—☐—☐—☐—☐—☐—☐ Very High

Simulator Sickness

Do you experience any of the following symptoms? How badly?

- 15a. General discomfort
None ☐—☐—☐—☐ Very High
- 15b. Fatigue
None ☐—☐—☐—☐ Very High
- 15c. Headache
None ☐—☐—☐—☐ Very High
- 15d. Eyestrain
None ☐—☐—☐—☐ Very High
- 15e. Difficulty focussing
None ☐—☐—☐—☐ Very High
- 15f. Increased salivation
None ☐—☐—☐—☐ Very High
- 15g. Sweating
None ☐—☐—☐—☐ Very High
- 15h. Nausea
None ☐—☐—☐—☐ Very High
- 15i. Difficulty concentrating
None ☐—☐—☐—☐ Very High
- 15j. Fullness of head
None ☐—☐—☐—☐ Very High
- 15k. Blurred vision
None ☐—☐—☐—☐ Very High
- 15l. Dizzy with open eyes
None ☐—☐—☐—☐ Very High
- 15m. Dizzy with closed eyes
None ☐—☐—☐—☐ Very High
- 15n. Vertigo
None ☐—☐—☐—☐ Very High
- 15o. Stomach awareness
None ☐—☐—☐—☐ Very High
- 15p. Burping
None ☐—☐—☐—☐ Very High