

The Honorable Tana Lin

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UNITED STATES DISTRICT COURT  
WESTERN DISTRICT OF WASHINGTON

BUNGIE, INC.,

Plaintiff,

v.

ELITE BOSS TECH INCORPORATED,  
11020781 CANADA INC., DANIEL  
FAGERBERG LARSEN, ROBERT JAMES  
DUTHIE NELSON, SEBASTIAAN JUAN  
THEODOOR CRUDEN A/K/A  
“LUZYPHER,” JOHN DOE NO. 4 A/K/A  
“GOODMAN,” YUNXUAN DENG A/K/A  
“YIMOSECAI,” ANTHONY ROBINSON  
A/K/A “RULEZZGAME,” EDDIE TRAN  
A/K/A “SENTIENT”, CHENZHIJIE CHEN  
A/K/A “CHENZHIJIE402, DSOFT, CVR  
37454303, MARTA MAGALHAES A/K/A  
MINDBENDER A/K/A BLUEGIRL, AND  
JOHN DOES NO. 9-20,

Defendants.

Case No. 2:21-cv-01112-TL

DECLARATION OF STEVEN GURIS  
IN SUPPORT OF MOTION FOR  
DEFAULT

1. My name is Steven Guris. I am the Director of Threat Investigations at Unit 221B,  
a private cybersecurity contracting firm.

2. Due to my experience at Unit 221B working with cheats in the video game  
industry, including reverse engineering, code analysis, and malware analysis, and particularly for

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1 Bungie’s *Destiny 2*, I am an expert in the field of video game cheats. Attached hereto as Exhibit  
2 1 is my resume.

3 3. At the direction of Unit 221B, Bungie, and Kamerman, Uncyk, Soniker & Klein  
4 (“KUSK”), I have investigated the *Destiny 2* cheat developed by Daniel Larsen and previously  
5 sold by Wallhax. I am also an active *Destiny 2* player, and have logged over 2,200 hours playing  
6 the game itself.  
7

8 4. The cheat created and maintained by Daniel Larsen in particular demanded  
9 substantial investments of time and resources to investigate, and review. For example, my team  
10 spent roughly 21 hours analyzing the Wallhax cheat to determine how it operated.  
11

12 **Cheat Software and Protection Against It**

13 5. Video game developers and publishers devote significant time and resources to  
14 preventing cheating in their games, including technical measures known as “anti-cheat.” These  
15 technical measures are designed to detect the system processes of cheat software and take  
16 automated actions against offending players.  
17

18 6. Obfuscation and circumvention mechanisms designed to allow a cheater to remain  
19 undetected by anti-cheat and other security measures are a core component of modern cheats.  
20 Larsen’s cheat as sold by Wallhax necessarily required Larsen to invest significant time and  
21 effort in evading those security measures.  
22

23 7. In a modern massively multiplayer online game such as Bungie’s *Destiny 2*, the  
24 instance of the game running on a player’s device, in this case a personal computer with a  
25 Microsoft Windows operating system, is referred to as that player’s game client. A game client  
26

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1 may be thought of as an extension of the game servers provided, owned, and maintained by the  
2 game company, and allows the customer to play the game on their device.

3  
4 8. In order to effectively render the environment of the game world and  
5 communicate nearly instantaneously with remote game servers, the player's game client must  
6 store key variables on the user's device. These variables may include data on the player's own  
7 character, the positions, health, and headings of other player's characters, or data related to  
8 objects within the game environment. These variables are contained in a device's memory while  
9 the user's game client is running (*i.e.* while the game software is actively running).

10  
11 9. As with all executing programs in a computer's memory, the memory spaces used  
12 by *Destiny 2* are considered privileged spaces: only *Destiny 2* should be able to access these  
13 spaces while in use, including to read data, and Windows' normal operation is intended to  
14 categorically prevent other applications from interfering with the protective measures Bungie  
15 puts in place to prevent exposure and manipulation of *Destiny 2*'s game data.

16  
17 10. Thus, in order to deliver the promised functionality of their cheat, cheat  
18 developers must breach these privileged memory spaces and read this data from the *Destiny 2*  
19 process. The same is true of a cheat for any of the many games in Wallhax's large catalog of  
20 available cheats.

21 **The Wallhax Cheat**

22  
23 11. Our investigation of the Wallhax cheat involved both review and use of the cheat  
24 as a user and, when and to the extent it was made available to us, review of the cheat's source  
25 code. We were ultimately provided with much but not all of that source code.  
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11 14. The core functionalities of cheats made available to users are likely to be  
12 incredibly similar within a genre of games. For example, Bungie’s *Destiny 2* is considered a  
13 “first person shooter.” The action of the game primarily takes place through the eyes of the  
14 player’s character with an emphasis on simulated combat using various guns or other ranged  
15 weapons. As a result, the core features of a cheat for *Destiny 2* commonly include the aimbot as  
16 well as ESP or “wallhack” features, terms explained in more detail below. The Wallhax *Destiny*  
17 *2* cheat created by Daniel Larsen offers each of those features. Wallhax also offered these same  
18 features as cheats available for use in other first person shooters, which suggests that they result  
19 from common code.  
20  
21

22 15. As gameplay in first person shooters primarily involves combat using guns and  
23 other ranged weapons, a player’s ability to reliably aim their weapon is considered a crucial skill.  
24 Aimbot features provide players with automated aim, enabling perfect accuracy on every shot.  
25  
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1 Players using an aimbot are nearly guaranteed to win any competitive match against other  
2 players.

3 16. As competitive gameplay in a first person shooter typically takes place within a  
4 varied and detailed map, awareness of your opponents and your surroundings is also a valued  
5 skill in such games, including in *Destiny 2*. ESP (extra-sensory perception) features - also  
6 referred to as a “wallhack” - allow players to see the locations of enemies, including other  
7 players, through walls, obstacles, or any other sight obscuring terrain. This functionality is  
8 commonly provided by creating graphical elements overlaid on a player’s game, normally  
9 colored boxes, indicating the location of otherwise hidden enemies.  
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MILLER NASH LLP  
ATTORNEYS AT LAW  
T: 206.624.8300 | F: 206.340.9599  
PIER 70  
2801 ALASKAN WAY, STE 300  
SEATTLE, WASHINGTON 98121

1 [REDACTED]  
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21 29. As a result, the Wallhax cheat is able to successfully execute against *Destiny 2*.  
22 The effects of the cheat within the game are immediately apparent to the cheater, as seen in the  
23 accompanying Exhibit B.

24 30. Attached hereto as Exhibit 2 is a screenshot of *Destiny 2* gameplay with the cheat  
25 active. Note the red text indicating the presence of an enemy behind the wall.  
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MILLER NASH LLP  
ATTORNEYS AT LAW  
T: 206.624.8300 | F: 206.340.9599  
PIER 70  
2801 ALASKAN WAY, STE 300  
SEATTLE, WASHINGTON 98121



1 [REDACTED]  
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MILLER NASH LLP  
ATTORNEYS AT LAW  
T: 206.624.8300 | F: 206.340.9599  
PIER 70  
2801 ALASKAN WAY, STE 300  
SEATTLE, WASHINGTON 98121

1 [REDACTED]

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15 **The Cheat's Logging Function**

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4 40. Some of the logged processes are not stand-alone applications, but are found on  
5 browser tabs that the user had open on their machine. In order to identify these tabs, the cheat  
6 must look at the name of every browser tab the user has opened every time the user launches the  
7 cheat.

8 41. In order to identify these applications, the Wallhax cheat must have scanned the  
9 user's computer memory to identify all of their running applications and logged only those which  
10 matched one of the strings it was searching for.

11 42. Although this log file only contains 20,868 entries, the cheat software most likely  
12 performed this scan each and every time it ran on a user's computer.

13 43. The log entry with the ID 1054262 identifies a browser tab called "[child's last  
14 name], [child's first name]: Algebra I, Grade 9 Period 8/ MHS - Google Chrome."

15 44. The log entry with the ID 1057613 identifies a browser tab called "[child's last  
16 name], [child's first name]: World History, Grade 9, Period 4, MHS Period 4."

17 45. I believe these log entries represent the cheat software's logging of the browser  
18 windows containing ninth grade students' remote-schooling sessions.

19 46. The log entry with the ID 947668 identifies a browser tab called  
20 "patientportal.mhsgenesis.health.mil login."

21 47. The log entry with the ID 1842909 identifies a browser tab called "MHS  
22 GENESIS Patient Portal - COVID-19 Results."  
23  
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1           48.     “MHS Genesis” is the patient portal for the United States Department of Defense.  
2 Attached hereto as Exhibit 3 is a true and correct copy of the Military Health System’s page on  
3 MHS Genesis, found online at [https://www.health.mil/Military-Health-](https://www.health.mil/Military-Health-Topics/Technology/MHS-GENESIS)  
4 Topics/Technology/MHS-GENESIS.  
5

6           49.     I believe these log entries represent the cheat software’s logging of the browser  
7 windows containing MHS Genesis Patient Portal sessions, including health care information.  
8 Based on this information, it appears that the Wallhax cheat software was scanning the  
9 computers of, and logging data from, active duty military or Department of Defense personnel.  
10

11     **Our Fees**

12           50.     Bungie has paid Unit 221B \$65,520 in connection with our work on the Wallhax  
13 cheat software, billed at our usual rates and pursuant to our agreement with Bungie.  
14

15     **Conclusion**

16           51.     In sum, the Wallhax cheat was fundamentally designed to breach private data  
17 spaces, evade security measures, and attempt to ensure that cheat users could continue to access  
18 *Destiny 2* and achieve success against other *Destiny 2* players based not on their own skill, but on  
19 the cheat software’s technology. And the Wallhax cheat has features that have no purpose other  
20 than evading Bungie’s anticheat technology, including the technologies Bungie uses to control  
21 that access to *Destiny 2*.  
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1 I declare under penalty of perjury under the laws of the United States that the foregoing is  
2 true and correct.

3  
4 DATED this 16th day of January at Marietta, GA.

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8 \_\_\_\_\_  
Steven Guris

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