IN THE UNITED STATES DISTRICT COURT FOR THE NORTHERN DISTRICT OF ALABAMA NORTHEASTERN DIVISION

The Board of Trustees for The)	
University of Alabama, for and on)	
behalf of The University of)	
Alabama in Huntsville,)	
Plaintiff,)))	Case No.
v.)	
)	
Vahid Heydari,)	
)	
Defendant.		

COMPLAINT

Plaintiff The Board of Trustees for The University of Alabama, a public educational and constitutional instrumentality of the State of Alabama, incorporated by statute, for and on behalf of The University of Alabama in Huntsville ("UAH"), files this complaint against Defendant Vahid Heydari ("Heydari") seeking declaratory and injunctive relief under the Copyright Act and the Defend Trade Secrets Act and states the following in support of its claims for relief.

NATURE OF THE ACTION

This lawsuit seeks to prevent Heydari from stealing and profiting from UAH's copyrighted cybersecurity software. Heydari developed the original version of the software while UAH employed him as a graduate teaching assistant. During his time at UAH, Heydari explicitly assigned UAH full ownership of the cybersecurity

software. Now, Heydari is seeking to market a purportedly "new" software derived from the original software. UAH seeks a declaration that Heydari's "new" software is a derivative work that infringes UAH's copyright in the original source code of the software. UAH further seeks an injunction prohibiting Heydari from any making any use or disclosure of UAH's copyrighted software or any derivative work based thereon.

PARTIES

1. Plaintiff UAH is a public university organized under the laws of Alabama. UAH is an arm of the State for purposes of immunity under the Eleventh Amendment to the U.S. Constitution and Article I, Section 14 of the Alabama Constitution. By filing this lawsuit, UAH does not waive, but expressly preserves, all immunities granted under those provisions. UAH is located at 301 Sparkman Drive, Huntsville, Alabama 35899.

2. Defendant Heydari is a former doctoral student at UAH where UAH employed him as a graduate teaching assistant. Upon information and belief, Heydari is a citizen of the Islamic Republic of Iran and currently resides at 9717 Evening Bird Lane, Laurel, Maryland 20723.

JURISDICTION AND VENUE

This Court has subject matter jurisdiction over this action under 28
 U.S.C. §§ 1331 and 1338. UAH asserts claims under the Copyright Act, 17 U.S.C.

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§ 101 *et seq.*, and the Defend Trade Secrets Act, <u>18 U.S.C.</u> § <u>1836</u> *et seq.* UAH further seeks a declaratory judgment under <u>28 U.S.C.</u> §§ <u>2201</u> and <u>2202</u>.

4. Heydari is subject to personal jurisdiction in Alabama under Rule 4(k)(1)(A) of the Federal Rules of Civil Procedure and Rule 4.2(b) of the Alabama Rules of Civil Procedure. Heydari has established sufficient minimum contacts with Alabama such that subjecting him to this Court's jurisdiction satisfies due process. These contacts include, but are not limited to:

- a. From approximately 2014–2016, UAH employed Heydari as a graduate teaching assistant.
- b. While employed by UAH, Heydari developed the original cybersecurity software on which his derivative software is based.
- c. While living in Alabama, Heydari executed an assignment providing UAH with ownership of MTD.
- d. In 2017, following Heydari's employment with UAH, Heydari continued to perform independent contractor work for UAH related to the cybersecurity software.
- e. Heydari lived in Huntsville, Alabama from 2014–2017, when he was doing work for UAH and studying for his Ph.D. as a doctoral student at UAH.

- f. Further, from roughly November 2018–September 2022, Heydari served as a consultant of Alabama-based Obtego Cyber, LLC, for which he continued to perform software development and other services related to the cybersecurity software that UAH licensed to Obtego. During this time, Heydari held himself out as Obtego's Chief Technology Officer. Heydari was also Obtego's largest shareholder.
- g. The License Agreement between UAH and Obtego, which gave Heydari the ability to continue developing and improving the UAHowned cybersecurity software, calls for application of Alabama law and lays venue in Alabama.
- h. Heydari knowingly and intentionally acted to harm Alabama-based UAH by infringing its copyright in the cybersecurity software and misappropriating the software for his own benefit, in violation of the Copyright Act and the Defend Trade Secrets Act. In short, Heydari first received access to the UAH cybersecurity software while living in Huntsville, Alabama, which he subsequently misappropriated.

5. Venue in this Court is proper under 28 U.S.C. § 1400(a) because Heydari "may be found" in this District. That is, because this Court has personal

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jurisdiction over Heydari, it is also a proper venue for this action. *See Palmer v. Braun*, 376 F.3d 1254, 1259 (11th Cir. 2004).

FACTUAL ALLEGATIONS

Heydari's Work for UAH

6. Heydari was a computer engineering doctoral student at UAH from 2014–2017. During most of that time, UAH also employed Heydari as a graduate teaching assistant.

7. While at UAH, Heydari developed a new cybersecurity software called the Moving Target Defense ("MTD"). Heydari's work on the MTD was the basis of Heydari's doctoral dissertation, and his employment as a graduate teaching assistant at UAH including working on MTD using UAH resources.

8. The MTD works to prevent cyberattacks by changing the IP address of a networked device repeatedly at a fast pace. By rapidly changing the IP address, the software disguises the attack surface of the device and makes it difficult for an attacker to target. The MTD works with networked systems running Internet Protocol Version 6 ("IPv6"). The MTD, with some modifications, can also work with Internet Protocol Version 4 ("IPv4").

9. The MTD has potential applications in critical infrastructure networks, aircraft avionics systems, uninterruptible autopilot systems, anti-censorship systems, and other networked systems, making it an economically valuable technology.

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10. Heydari developed the MTD while employed by UAH as a teaching assistant, working within his field of study, working under the supervision and direction of UAH faculty, and using UAH's monetary and other resources.

11. While working on the MTD as an employee of UAH, Heydari became privy to methods, processes, and know-how that are not generally known and are invaluable to implementing the MTD for commercial use.

The Relevant Agreements Give UAH Ownership of the Cybersecurity Software

12. In recognition of UAH's ownership of MTD, Heydari assigned all rights to the MTD and related technologies to UAH via five different invention assignment documents dated June 1, 2016.

13. Following Heydari's assignment of his rights in the MTD to UAH, UAH entered into a license agreement (the "License Agreement") with a private company, Obtego Cyber, LLC ("Obtego"), to improve and commercialize the MTD. Obtego was formerly known as Endgame Technologies, LLC.

14. The License Agreement became effective on October 20, 2017. The License Agreement provided Obtego the right to further develop, improve, and market the MTD to customers; however, UAH retained full ownership in the MTD.

15. In consideration for the License Agreement, Obtego granted UAH a 10% equity share in its business. Obtego further agreed to pay UAH certain royalties on income generated from the MTD.

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16. Under the License Agreement, Obtego agreed that the MTD was of great value to UAH and that it would take all appropriate measures to protect UAH's interests therein. Obtego further agreed that it would not permit any third party to access the MTD except as authorized in the License Agreement.

17. Under the License Agreement, Obtego also agreed that all derivative works developed by Obtego, or any of its agents, sublicensees, contractors, employees, or assigns, shall be the property of UAH.

18. The License Agreement defines derivative works by reference to the definition in the Copyright Act, 17 U.S.C. § 101. Under that provision of the Copyright Act, a "derivative work" is one "based upon one or more preexisting works," taking any form "in which a work may be recast, transformed, or adapted. A work consisting of editorial revisions, annotations, elaborations, or other modifications which, as a whole, represent an original work of authorship, is a 'derivative work.'" 17 U.S.C. § 101.

19. In 2018, Heydari began working as a consultant for Obtego to assist with the development and commercialization of MTD. While working for Obtego, Heydari held himself out as Obtego's Chief Technology Officer.

20. Heydari entered into a consulting agreement with Obtego dated November 19, 2018 (the "Consulting Agreement").

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21. Under the Consulting Agreement, Heydari agreed to develop certain technologies to assist with the implementation and commercialization of the MTD in exchange for a fee.

22. Under the Consulting Agreement, Heydari further agreed that all works of authorship developed under the Consulting Agreement comprising intellectual property shall be deemed a work made for hire under 17 U.S.C. § 101.

23. In addition, by signing the Consulting Agreement, Heydari irrevocably assigned to Obtego all rights to all works of authorship developed under the Consulting Agreement that may not be deemed works made for hire.

24. Under the Consulting Agreement, Heydari also agreed that the MTD and related technologies were the "sole property" of Obtego and its "licensors," including UAH. He further agreed that Obtego or UAH, as the case may be, "shall be the sole owner of all patents, copyrights, know-how, trade secrets and other rights in connection with" the technologies.

25. Under the Consulting Agreement, Heydari further agreed that the technologies he was to develop—along with all methods, strategies, algorithms, and coding—were to be considered proprietary information and trade secrets belonging to Obtego and not to be disclosed to any third parties.

Heydari Develops and Markets an Infringing Software While Cutting Out UAH and Obtego

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26. While working under the Consulting Agreement with Obtego, Heydari developed improvements to the MTD called "Moving Target Defense – Prevention of Remote and In Situ Attack" ("MTD–PRISA"). The MTD–PRISA includes technology designed to prevent in-house bad actors from hacking into a protected system.

27. In January 2021, Heydari disclosed to Obtego that, "[d]uring the past few months," he had invented a "new" technology to hide the attack surface for networked devices using IPv4. IPv4 is an older Internet Protocol (IP) address than IPv6, the Internet Protocol version with which the MTD was originally designed to work. Heydari's ostensibly "new" technology is referred to herein as "MTD IPv4."

28. Heydari claimed that his MTD IPv4 software had nothing to do with MTD, MTD-PRISA, UAH, Obtego, or anyone else and therefore Heydari was the sole owner of the MTD IPv4.

29. Nonetheless, Heydari was working as Obtego's paid consultant when he created and developed the MTD IPv4. Further, Heydari admitted to Obtego that MTD, MTD-PRISA, and MTD IPv4 are implemented "in a similar way" and MTD IPv4 "with some small modification can hide the attack surface" for networked devices running IPv6 "without IP hopping."

30. Heydari could not have developed the MTD IPv4 without using the UAH-owned MTD and MTD-PRISA.

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31. Heydari offered his "new" MTD IPv4 technology to Obtego for commercialization in exchange for a fee. Obtego agreed, and the parties entered into a product deployment agreement dated May 19, 2021 (the "Product Deployment Agreement").

32. Under the Product Deployment Agreement, Heydari agreed to develop IPv4 into a fully functional, commercial-grade technology.

33. Similar to what Heydari agreed in the Consulting Agreement, Heydari agreed in the Product Deployment Agreement that the technologies he was to develop—along with all methods, strategies, algorithms, and coding—were to be considered proprietary information and trade secrets and were not to be disclosed to any third parties.

34. Similar to what Heydari agreed in the Consulting Agreement, Heydari further agreed in the Product Deployment Agreement that all works of authorship developed under the Agreement comprising intellectual property shall be deemed a work made for hire under 17 U.S.C. § 101.

35. Similar to the Consulting Agreement, by signing the Product Deployment Agreement, Heydari irrevocably assigned to Obtego all rights to all works of authorship developed under the Product Deployment Agreement that may not be deemed works made for hire.

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36. Under the Product Deployment Agreement, Heydari also agreed that the MTD IPv4 and related technologies developed under the Product Deployment Agreement were the "sole property" of Obtego and its "licensors," including UAH, and that Obtego or UAH, as the case may be, "shall be the sole owner of all patents, copyrights, know-how, trade secrets and other rights in connection with" the technologies.

37. To further clarify that all copyright ownership in the MTD, the MTD– PRISA, and the MTD IPv4 were vested in UAH, Obtego executed a written assignment agreement in UAH's favor dated October 27, 2022 (the "Assignment Agreement"). By executing the Assignment Agreement, Obtego assigned all its copyrights in the MTD, MTD–PRISA, and the MTD IPv4 to UAH.

38. Notwithstanding these agreements, Heydari claims ownership of the MTD IPv4. Upon information and belief, Heydari has further begun offering the MTD IPv4 to customers on his own, thereby cutting Obtego and UAH out of any proceeds.

39. UAH and Obtego have requested that Heydari provide the source code for the MTD IPv4 to allow UAH to compare that source code to the source codes of MTD and MTD–PRISA, to evaluate whether the MTD IPv4 is a derivative work of the MTD and MTD–PRISA. Yet, Heydari has refused to comply with UAH and

Obtego's request, confirming UAH's belief that the MTD IPv4 is indeed a derivative work of the MTD and MTD–PRISA.

40. Moreover, Heydari has threatened to disclose the source code of the MTD, MTD–PRISA, and MTD IPv4 to third parties, which would destroy the value of these technologies.

<u>Count One – Copyright Infringement under 17 U.S.C. § 411</u>

41. UAH incorporates and realleges the allegations in paragraphs 6–40.

42. The MTD, MTD–PRISA, and MTD IPv4 are original works of authorship fixed in a tangible medium of expression from which they can be perceived, reproduced, or otherwise communicated.

43. Because the MTD IPv4 is based upon the MTD and MTD–PRISA, the MTD IPv4 is a derivative work of the UAH-owned MTD and MTD–PRISA under 17 U.S.C. § 101.

44. As provided in the License Agreement, UAH has the exclusive right to prepare derivative works based on the MTD under 17 U.S.C. § 106(2).

45. Further, as provided in the Consulting Agreement and Product Deployment Agreement, Heydari assigned all rights to the MTD IPv4 to Obtego.

46. Moreover, as provided in the Assignment Agreement, Obtego assigned all its copyright rights in the MTD, MTD–PRISA, and MTD IPv4 to UAH.

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47. Heydari has violated the exclusive rights granted to UAH by the Copyright Act, 17 U.S.C. § 101 *et seq.*, by creating a derivative work (the MTD IPv4) based on the MTD and MTD–PRISA, claiming the MTD IPv4 as his own, reproducing the MTD IPv4, and offering it to customers as his own product, all without authorization from UAH.

48. UAH has fulfilled all conditions precedent under 17 U.S.C. § 411 before filing this infringement action. On November 4, 2022, UAH filed an application for registration with the U.S. Copyright Office for the MTD–PRISA (Registration No. TXu 2-343-971). On November 18, 2022, the U.S. Copyright Office granted UAH's registration for the MTD–PRISA, effective November 4, 2022. Concurrent with the filing of this complaint, UAH is serving notice and a copy of the complaint on the Register of Copyrights.

49. UAH has been injured by Heydari's acts of infringement. Specifically, by claiming these UAH-owned technologies as his own and marketing them customers, Heydari has cut UAH out of proceeds it is entitled to.

WHEREFORE, UAH requests a declaration under 28 U.S.C. §§ 2201 and 2202 that the MTD IPv4 is a derivative work of the UAH-owned MTD; that the MTD IPv4 is a derivative work of the UAH-owned MTD–PIRSA; that, by virtue of the License Agreement, the Consulting Agreement, the Product Deployment Agreement, the Assignment Agreement, and the Copyright Act, UAH is the owner

of the copyright in the MTD IPv4; and that Heydari's unauthorized use and reproduction of the MTD IPv4 constitutes copyright infringement. UAH further requests an injunction under 17 U.S.C. § 502 prohibiting Heydari from reproducing, selling, distributing, disclosing, or otherwise making use of the MTD IPv4 software, the MTD software, the MTD–PRISA, or any derivative works thereof without authorization from UAH. UAH does not seek monetary damages against Heydari at this time but reserves the right to do so in the future and further reserves the right to request a jury trial related to any potential future claim for monetary damages.

<u>Count Two – Misappropriation under the Defend Trade Secrets Act.</u> <u>18 U.S.C. § 1836</u>

50. UAH incorporates and realleges the allegations in paragraphs 6–40.

51. By virtue of the License Agreement, the Consulting Agreement, and the Product Deployment Agreement, the MTD IPv4, MTD, MTD–PRISA, and related technologies are the property of UAH.

52. The MTD IPv4, MTD, and MTD–PRISA software, which are contained in source codes, constitute trade secrets owned by UAH.

53. The MTD IPv4, MTD, and MTD–PRISA have independent economic value in that they have a number of potential cybersecurity applications capable of generating revenue for the owner (UAH) and are not generally known to or readily accessible by other persons who could obtain economic value from their disclosure or use.

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54. UAH takes and has taken reasonable measures to keep the MTD IPv4, MTD, and MTD–PRISA secret and confidential, including the nondisclosure provisions in the License Agreement described in paragraph 16 above.

55. In accordance with its obligations under the License Agreement, Obtego also takes and has taken reasonable measures to keep the MTD IPv4, MTD, and MTD–PRISA secret, including via the nondisclosure provisions in the Consulting Agreement and the Product Deployment Agreement with Heydari described in paragraphs 25 and 33 above.

56. Heydari is aware of his obligations as an employee of UAH and in the Consulting Agreement and the Product Deployment Agreement to keep the MTD IPv4, MTD, and MTD–PRISA secret and not disclose them to third parties.

57. Heydari has knowingly, intentionally, maliciously, and improperly misappropriated the MTD IPv4, MTD, and MTD–PRISA for his own economic benefit by wrongfully claiming the MTD IPv4 as his own work, reproducing it, and offering it to customers without authorization from UAH.

58. Further, Heydari has knowingly, intentionally, maliciously, and improperly threatened to disclose the MTD IPv4, MTD, and MTD–PRISA to third parties in violation of his obligations under the Consulting Agreement and the Product Deployment Agreement.

59. UAH has been damaged by Heydari's misappropriation. Specifically, by claiming these UAH-owned technologies as his own and marketing them customers, Heydari has cut UAH out of proceeds to which it is entitled. UAH will also be damaged if Heydari carries out his threat to disclose the MTD IPv4, MTD, and MTD–PRISA to third parties.

WHEREFORE, UAH requests a declaration under 28 U.S.C. §§ 2201 and 2202 that, by virtue of the License Agreement, the Consulting Agreement, the Product Deployment Agreement, and the Copyright Act, UAH is the owner of the MTD IPv4, MTD, and MTD–PRISA; that the MTD IPv4, MTD, and MTD–PRISA constitute trade secrets of UAH; and that Heydari's unauthorized use and reproduction of the MTD IPv4 constitutes trade secret misappropriation under 18 U.S.C. § 1836. UAH further requests an injunction under 18 U.S.C. § 1836(b)(3)(A) prohibiting Heydari from reproducing, selling, disclosing, or otherwise misappropriating the MTD IPv4, MTD, or MTD–PRISA. UAH does not seek monetary damages against Heydari at this time but reserves the right to do so in the future and request a jury trial related to any claim for monetary damages.

Dated: November 28, 2022

Respectfully submitted,

/s/ Jeffrey D. Dyess

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