

**UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MASSACHUSETTS**

NEURALMAGIC, INC.)	
)	
<i>Plaintiff,</i>)	
)	
v.)	Civil Action No. 20-10444
)	
FACEBOOK, INC. AND ALEKSANDAR ZLATESKI)	
)	
<i>Defendants.</i>)	Jury Trial Demanded
)	
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)	
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)	

COMPLAINT

Plaintiff NeuralMagic, Inc. (“Neural Magic” or the “Company”), by and through its undersigned attorneys, Quinn Emanuel Urquhart & Sullivan LLP, for its claims against Defendants, Facebook, Inc. (“Facebook”) and Aleksandar Zlateski (“Zlateski,” and, collectively, “Defendants”) hereby states as follows.

NATURE OF THE ACTION

1. Neural Magic is a small start-up co-founded by MIT professor Nir Shavit and MIT research scientist Alex Matveev in 2017 and based in Somerville, MA. One of Neural Magic’s technologies—a set of computer algorithms encompassed within a machine compiler—is the result of decades of research on neural networks and artificial intelligence. These algorithms have the potential to revolutionize the field of artificial intelligence (“AI”), in part by allowing complicated mathematical functions to run efficiently on commodity-based

computers—using no specialized hardware. These algorithms will also allow research scientists to use much larger data sets, heretofore a severe limitation on the advancement of machine learning. Indeed, Neural Magic’s technology is a key to unlocking the next wave of advancements in many fields: from healthcare and cancer screening, to how customers shop online and identify items of interest. This technology can also help bring AI to the masses by reducing barriers of hardware scarcity and cost.

2. Defendant Aleksandar Zlateski was a trusted part of the Neural Magic team almost from its inception; he was Neural Magic’s first employee. As Technology Director at Neural Magic, Zlateski had access to all of Neural Magic’s trade secrets, confidential, proprietary information, and business plans for the future. And, critically, he had access to and helped author the software for one of Neural Magic’s prized jewels: the source code of its compiler that encapsulates Neural Magic’s above-described algorithms.

3. In July 2019, Zlateski left Neural Magic to work in a capacity that he represented, and Neural Magic understood, was unrelated to the particular compiler work he had done for the Company. While Facebook is one of the largest users of artificial intelligence in the world—and a potential customer of Neural Magic’s—Neural Magic trusted Zlateski to honor non-disclosure and non-compete agreements he had entered in connection with his work at Neural Magic, and Neural Magic believed it had nothing to fear from his anticipated work in an unrelated area of artificial intelligence.

4. That trust was misplaced. Less than six months later, in December 2019, Facebook announced that it had published to the world—as open source—a compiler that, investigation would later reveal, includes the same proprietary algorithms that form the heart of Neural Magic’s technology and intellectual property. At the time, Facebook even publicly

thanked Zlateski for his role in cracking this key problem for Facebook's continued advancement in the world of artificial intelligence, writing in their release notes for the misappropriated compiler algorithms that the "team would like to acknowledge and greatly appreciates the contributions of @zlateski to sparse kernels and unified code cache."

5. Zlateski breached the non-disclosure and non-competition agreement he signed with Neural Magic as Technology Director. Moreover, Zlateski and his new employer Facebook engaged in acts and conduct in the Commonwealth of Massachusetts that violate Massachusetts trade secrets laws, Chapter 93A, and the Defend Trade Secrets Act of 2016. Facebook has refused repeated requests to cease these acts and remove misappropriated material from its own code. Neural Magic has therefore been forced to bring these claims to protect its intellectual property.

PARTIES

6. Plaintiff Neural Magic is a Delaware corporation, with its corporate headquarters in Somerville, Massachusetts.

7. Defendant Facebook is a Delaware corporation with a principal place of business at 1 Hacker Way, Menlo Park, California. Facebook maintains offices in Cambridge, Massachusetts.

8. Defendant Aleksandar Zlateski is a natural person who, on information and belief, resides at 211 N End Ave Apt 3K New York, NY 10282. Zlateski worked as a Neural Magic employee in Massachusetts for over a year pursuant to the employment contract he signed with Neural Magic, governed by Massachusetts law. During that time, he helped develop the proprietary algorithms and trade secrets that are the subject of this action.

JURISDICTION & VENUE

9. This is an action for trade secret misappropriation under state trade secrets law and the Defend Trade Secrets Act of 2016 (18 U.S.C. § 1836 *et seq.*), and state and common law claims for breach of contract, tortious interference with contractual relations and prospective contractual relations, unjust enrichment, and unfair trade practices. This Court has jurisdiction pursuant to 28 U.S.C. §§ 1331, 1338(a), 1338(b), and 1367(a).

10. This Court has personal jurisdiction over Facebook, Inc. Facebook maintains offices in Cambridge, MA. Furthermore, Facebook transacts business in Massachusetts, has caused tortious injury to Neural Magic in Massachusetts, has an interest in using or possessing real property in Massachusetts, and contracts to supply services or things in Massachusetts.

11. This Court has personal jurisdiction over Aleksandar Zlateski. Aleksandar Zlateski resided in Massachusetts, performed services for a Massachusetts company, Neural Magic, and entered into a contract in Massachusetts governed by Massachusetts law, forming the foundation for many of the claims at issue here. Zlateski worked on the algorithms and trade secrets that form the basis for this action during his time at Neural Magic in Massachusetts. Furthermore, Zlateski has transacted business with Neural Magic in Massachusetts, has served as Technology Director of Neural Magic in Massachusetts, maintains a stake in Massachusetts-based Neural Magic, and has caused tortious injury to Neural Magic in Massachusetts.

12. Venue is proper in this Court pursuant to 28 U.S.C. §§ 1391(b) and 1391(c). Aleksandar Zlateski is a former resident of Massachusetts, a substantial part of the events giving rise to the claims alleged herein occurred in Massachusetts, and Facebook, Inc. has a regular and established place of business in Massachusetts.

FACTUAL ALLEGATIONS

A. Neural Magic's Founding

13. Nir Shavit is the CEO & Co-Founder of Neural Magic. He is a Professor of Computer Science at the Massachusetts Institute of Technology. Over the course of his more than three-decade career, Professor Shavit has worked tirelessly to advance computer processing. In 2016, after a long and successful career in the field of multicore processing, Professor Shavit embarked on a new challenge—the development of artificial intelligence systems to reconstruct the connectivity of neural tissue in brains.

14. While Professor Shavit and Matveev were working in their MIT Lab running tests on a large set of neurobiology data, they discovered that, with the right algorithms, they could run neural networks on these large neurobiological datasets using only standard computers without specialized hardware. In particular, Professor Shavit and Matveev realized that they could achieve these exceptional speeds on standard computers that have much higher memory capacities. That was the birth of Neural Magic, and together Professor Shavit and Matveev founded the company in 2018 to bring their vision to fruition and to the marketplace.

15. After extensive multicore computing research, testing, analysis, and refining of the algorithms that Professor Shavit initially developed in his neurobiology lab, the novel algorithms, techniques, design patterns, optimization strategies, and formulas (collectively, the “Neural Magic Algorithms”) at the heart of Neural Magic were created. The Neural Magic Algorithms enable certain types of neural networks to run in a highly-efficient manner on commodity Central Processing Units (“CPUs”)—something found on every laptop and desktop—instead of specialized chips like GPUs. Through these novel algorithms, and the unique way in which they work together to overcome obstacles experts in the field viewed as

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