**REFERENCES**

[1] Ba Dung Le, Guanhua Wang, Mehwish Nasim, and Ali Babar. Gathering cyber threat intelligence from twitter using novelty classification. arXiv preprint arXiv:1907.01755, 2019.

[2] Gartner Research. Definition: Threat intelligence, 2013.

[3] Robert David Steele. Open source intelligence: What is it? why is it important to the military? American Intelligence Journal, pages 35–41, 1996.

[4] Carl Sabottke, Octavian Suciu, and Tudor Dumitras, . Vulnerability disclosure in the age of social media: Exploiting twitter for predicting real-world exploits. In 24th {USENIX} Security Symposium ({USENIX} Security 15), pages 1041–1056, 2015.

[5] Anna Sapienza, Alessandro Bessi, Saranya Damodaran, Paulo Shakarian, Kristina Lerman, and Emilio Ferrara. Early warnings of cyber threats in online discussions. In 2017 IEEE International Conference on Data Mining Workshops (ICDMW), pages 667–674. IEEE, 2017.

[6] Eric Nunes, Ahmad Diab, Andrew Gunn, Ericsson Marin, Vineet Mishra, Vivin Paliath, John Robertson, Jana Shakarian, Amanda Thart, and Paulo Shakarian. Darknet and deepnet mining for proactive cybersecurity threat intelligence. In 2016 IEEE Conference on Intelligence and Security Informatics (ISI), pages 7–12. IEEE, 2016.

[7] Sudip Mittal, Prajit Kumar Das, Varish Mulwad, Anupam Joshi, and Tim Finin. Cybertwitter: Using twitter to generate alerts for cybersecurity threats and vulnerabilities. In 2016 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining (ASONAM), pages 860–867. IEEE, 2016.

[8] Abbas Attarwala, Stanko Dimitrov, and Amer Obeidi. How efficient is twitter: Predicting 2012 us presidential elections using support vector machine via twitter and comparing against iowa electronic markets. In 2017 Intelligent Systems Conference (IntelliSys), pages 646–652. IEEE, 2017.

[9] Nuno Dionísio, Fernando Alves, Pedro M Ferreira, and Alysson Bessani. Towards end-to-end cyberthreat detection from twitter using multi-task learning. In 2020 International Joint Conference on Neural Networks (IJCNN), pages 1–8. IEEE, 2020.

[10] Onook Oh, Manish Agrawal, and H Raghav Rao. Information control and terrorism: Tracking the mumbai terrorist attack through twitter. Information Systems Frontiers, 13(1):33–43, 2011.

[11] Takeshi Sakaki, Makoto Okazaki, and Yutaka Matsuo. Earthquake shakes twitter users: real-time event detection by social sensors. In Proceedings of the 19th international conference on World wide web, pages 851–860, 2010.

[12] Bertrand De Longueville, Robin S Smith, and Gianluca Luraschi. " omg, from here, i can see the flames!" a use case of mining location based social networks to acquire spatio-temporal data on forest fires. In Proceedings of the 2009 international workshop on location based social networks, pages 73–80, 2009.

[13] Anna Sapienza, Sindhu Kiranmai Ernala, Alessandro Bessi, Kristina Lerman, and Emilio Ferrara. Discover: Mining online chatter for emerging cyber threats. In Companion Proceedings of the The Web Conference 2018, pages 983–990, 2018.

[14] Rupinder Paul Khandpur, Taoran Ji, Steve Jan, Gang Wang, Chang-Tien Lu, and Naren Ramakrishnan. Crowdsourcing cybersecurity: Cyber attack detection using social media. In Proceedings of the 2017 ACM on Conference on Information and Knowledge Management, pages 1049– 1057, 2017.

[15] Quentin Le Sceller, ElMouatez Billah Karbab, Mourad Debbabi, and Farkhund Iqbal. Sonar: Automatic detection of cyber security events over the twitter stream. In Proceedings of the 12th International Conference on Availability, Reliability and Security, pages 1–11, 2017.

[16] Kuo-Chan Lee, Chih-Hung Hsieh, Li-Jia Wei, Ching-Hao Mao, JyunHan Dai, and Yu-Ting Kuang. Sec-buzzer: cyber security emerging topic mining with open threat intelligence retrieval and timeline event annotation. Soft Computing, 21(11):2883–2896, 2017.

[17] Alan Ritter, Evan Wright, William Casey, and Tom Mitchell. Weakly supervised extraction of computer security events from twitter. In Proceedings of the 24th International Conference on World Wide Web, pages 896–905, 2015.

[18] Andrei Queiroz, Brian Keegan, and Fredrick Mtenzi. Predicting software vulnerability using security discussion in social media. In European Conference on Cyber Warfare and Security, pages 628–634. Academic Conferences International Limited, 2017.

[19] Avishek Bose, Vahid Behzadan, Carlos Aguirre, and William H Hsu. A novel approach for detection and ranking of trendy and emerging cyber threat events in twitter streams. In 2019 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining (ASONAM), pages 871–878. IEEE, 2019.

[20] Blake E Strom, Andy Applebaum, Doug P Miller, Kathryn C Nickels, Adam G Pennington, and Cody B Thomas. Mitre att&ck: Design and philosophy. In Technical report. The MITRE Corporation, 2018.

[21] Bert-Jaap Koops, Jaap-Henk Hoepman, and Ronald Leenes. Open-source intelligence and privacy by design. Computer Law & Security Review, 29(6):676–688, 2013.

[22] Rodrigo Campiolo, Luiz Arthur F Santos, Daniel Macêdo Batista, and Marco Aurélio Gerosa. Evaluating the utilization of twitter messages as a source of security alerts. In Proceedings of the 28th Annual ACM Symposium on Applied Computing, pages 942–943, 2013.

[23] Nuno Dionísio, Fernando Alves, Pedro M Ferreira, and Alysson Bessani. Cyberthreat detection from twitter using deep neural networks. In 2019 International Joint Conference on Neural Networks, pages 1–8. IEEE, 2019.

[24] Amirreza Niakanlahiji, Jinpeng Wei, and Bei-Tseng Chu. A natural language processing based trend analysis of advanced persistent threat techniques. In 2018 IEEE International Conference on Big Data (Big Data), pages 2995–3000. IEEE, 2018.

[25] Gbadebo Ayoade, Swarup Chandra, Latifur Khan, Kevin Hamlen, and Bhavani Thuraisingham. Automated threat report classification over multisource data. In 2018 IEEE 4th International Conference on Collaboration and Internet Computing (CIC), pages 236–245. IEEE, 2018.

[26] Vahid Behzadan, Carlos Aguirre, Avishek Bose, and William Hsu. Corpus and deep learning classifier for collection of cyber threat indicators in twitter stream. In 2018 IEEE International Conference on Big Data (Big Data), pages 5002–5007, 2018.

[27] Ashok Deb, Kristina Lerman, and Emilio Ferrara. Predicting cyber-events by leveraging hacker sentiment. Information, 9(11):280, 2018.

[28] Ryan Williams, Sagar Samtani, Mark Patton, and Hsinchun Chen. Incremental hacker forum exploit collection and classification for proactive cyber threat intelligence: An exploratory study. In 2018 IEEE International Conference on Intelligence and Security Informatics (ISI), pages 94–99. IEEE, 2018.

[29] A Rakhlin. Convolutional neural networks for sentence classification. GitHub, 2016.