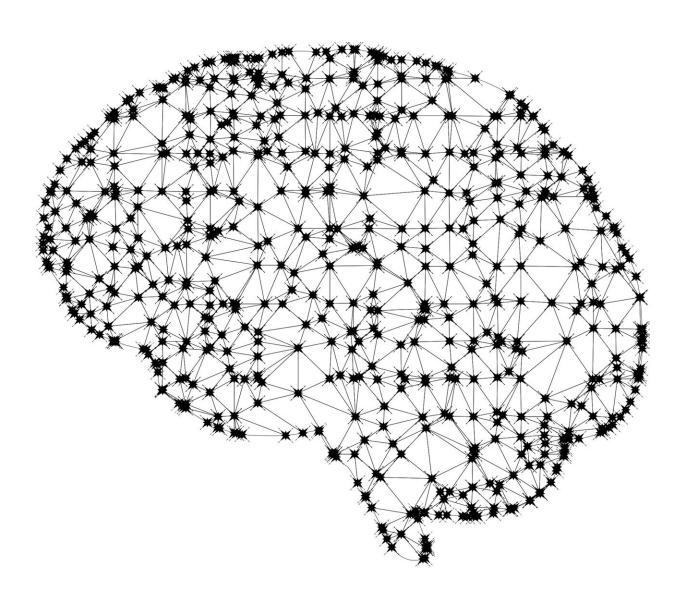


AI deployed in the war on pedophilia

February 24 2022



Credit: Pixabay/CC0 Public Domain



Information technologists at Otto von Guericke University Magdeburg have developed an AI-based app to enable people with pedophilic tendencies to make use of initial consultations and remote treatment anonymously and with their identity concealed. By deploying this technology on the user's device, therapists will be unable to recognize either the voice or the way of speaking of the caller but will still be able to hear all of the emotional expression and personality of the person seeking help that is needed for clinical diagnostic assessment. The people affected, who may not have contacted counseling services before due to shame or fear of social marginalization, will thus be granted access to preventative support.

The aim of the engineers in the Institute for Information Technology and Communications at the University is to remove the speaker's identity from the <u>voice</u> recording while retaining the emotions and expression of personality. The team around Junior Professor Dr. Ing. Ingo Siegert will then examine whether the possibility of anonymizing the verbal communication channel results in greater acceptance of preventative <u>treatment</u> against <u>child abuse</u> and promotes an open exchange without negatively impacting on communication during the treatment.

"By using state-of-the-art AI methods during remote treatment by telephone or video telephony, the voice of the person seeking help will be altered in such a way that it will not be possible to identify them," explains the Project Leader, Junior Professor Dr. Ing. Ingo Siegert. "Since this technology will be used by the user on their device, it will also be impossible to de-anonymize the voice later. The person seeking help can feel completely safe and seek professional help without fear of reprisals afterwards."

The anonymization of the voice during telephone contact or during treatment supported by video telephony is facilitated by an innovative voice synthesizer that is able to generate an artificial voice. This



synthesizer transforms the original voice data of the user into highquality voice recordings that retain the essential voice information and individual intonation but do not reveal the identity of the speaker. Furthermore, the technology is secured by, for example, intelligent water marking, making it impossible to misuse the recording for any purposes beyond its use in the initial consultation.

Junior Professor Ingo Siegert and Professor Dr. Sebastian Stober, a computer scientist from the Artificial Intelligence Lab at the University of Magdeburg, are collaborating on the AnonymPrevent research project funded by the Volkswagen Foundation to the tune of 1.4 million euros with the Quality and Usability Lab at TU Berlin and the Institute of Sexology and Sexual Medicine—Charité. The Institute has been leading national and international projects for people with pedophilic or hebephilic tendencies that are motivated to seek treatment for many years, including the "Praeventionsprojekt Dunkelfeld" (Dark Field Prevention Project), which was founded in 2004. Men who are inclined towards pedophilia are supported therapeutically here in their efforts not to perpetrate child sexual abuse either for the first time or repeatedly, or to consume any child pornography on the internet. Over and above this, the project aims to raise public awareness for the subject and to show that there are people with a sexual proclivity for children who have an awareness of their problem and do not wish to perpetrate abuse. "However, our research approach is not limited to the Dark Field Project or this subject," explains Ingo Siegert, "but could in fact be used in many different areas, for example, treatment for victims, in witness protection programs or for whistle blowers."

Information technologists at Otto von Guericke University Magdeburg have developed an AI-based app to enable people with pedophilic tendencies to make use of initial consultations and remote treatment anonymously and with their identity concealed. By deploying this technology on the user's device, therapists will be unable to recognize



either the voice or the way of speaking of the caller but will still be able to hear all of the emotional expression and personality of the person seeking help that is needed for clinical diagnostic assessment. The people affected, who may not have contacted counseling services before due to shame or fear of social marginalization, will thus be granted access to preventative support.

The aim of the engineers in the Institute for Information Technology and Communications at the University is to remove the speaker's identity from the voice recording while retaining the emotions and expression of personality. The team around Junior Professor Dr. Ing. Ingo Siegert will then examine whether the possibility of anonymizing the verbal communication channel results in greater acceptance of preventative treatment against child abuse and promotes an open exchange without negatively impacting on communication during the treatment.

"By using state-of-the-art AI methods during remote treatment by telephone or video telephony, the voice of the person seeking help will be altered in such a way that it will not be possible to identify them," explains the Project Leader, Junior Professor Dr. Ing. Ingo Siegert. "Since this technology will be used by the user on their device, it will also be impossible to de-anonymize the voice later. The person seeking help can feel completely safe and seek professional help without fear of reprisals afterwards."

The anonymization of the voice during telephone contact or during treatment supported by video telephony is facilitated by an innovative voice synthesizer that is able to generate an artificial voice. This synthesizer transforms the original voice data of the user into high-quality voice recordings that retain the essential voice information and individual intonation but do not reveal the identity of the speaker. Furthermore, the technology is secured by, for example, intelligent water marking, making it impossible to misuse the recording for any purposes



beyond its use in the initial consultation.

Junior Professor Ingo Siegert and Professor Dr. Sebastian Stober, a computer scientist from the Artificial Intelligence Lab at the University of Magdeburg, are collaborating on the AnonymPrevent research project funded by the Volkswagen Foundation to the tune of 1.4 million euros with the Quality and Usability Lab at TU Berlin and the Institute of Sexology and Sexual Medicine—Charité. The Institute has been leading national and international projects for people with pedophilic or hebephilic tendencies that are motivated to seek treatment for many years, including the "Praeventionsprojekt Dunkelfeld" (Dark Field Prevention Project), which was founded in 2004. Men who are inclined towards pedophilia are supported therapeutically here in their efforts not to perpetrate child sexual abuse either for the first time or repeatedly, or to consume any child pornography on the internet. Over and above this, the project aims to raise public awareness for the subject and to show that there are people with a sexual proclivity for children who have an awareness of their problem and do not wish to perpetrate abuse. "However, our research approach is not limited to the Dark Field Project or this subject," explains Ingo Siegert, "but could in fact be used in many different areas, for example, treatment for victims, in witness protection programs or for whistle blowers."

More information: Project information page: portal.volkswagenstiftung.de/s ... Details.do?ref=9B330

Provided by Otto-von-Guericke-Universität Magdeburg

Citation: AI deployed in the war on pedophilia (2022, February 24) retrieved 28 April 2024 from https://techxplore.com/news/2022-02-ai-deployed-war-pedophilia.html



This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.