Vertiefungsmodul Interdisziplinär VIAD - Synthetic Normal

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Angebot für

Bisheriges Studienmodell > Design > Bachelor Design > Design interdisziplinär > 3. Semester

Nummer und Typ	BDE-VIAD-V-I-3333.06.22H.001 / Moduldurchführung
Modul	Vertiefungsmodul Interdisziplinär VIAD - Synthetic Normal
Veranstalter	Departement Design
Leitung	Paulina Zybinska Yann Martins
Zeit	Di 6. Dezember 2022 bis Fr 23. Dezember 2022 / 8:30 - 17 Uhr
Anzahl Teilnehmende	8 - 18
ECTS	4 Credits
Voraussetzungen	Willingness to work actively and self-motivated on projects Interest in new technologies At least some programming knowledge
Lehrform	Class sessions include lectures, discussions, mentoring sessions, in-class presentations, assignments, independent study/investigation blocks and independent practical work on prototypes and final works. Projects are conducted in teams.
Zielgruppen	Wahlpflichtmodul Bachelor Design, 3. Semester
Lernziele / Kompetenzen	During the course we would like to explore a different approach to counter disobedient AI that revolves around the creation of the "Synthetic Normal". The goal is to use Machine Learning (ML) algorithms to create fake user profiles (bots) which match the criteria of “normalcy” i.e. based on the user data the system will have the ability to average the “out of the norm” qualities. During the course we will investigate the way social media platforms track users' posts, interactions with others, I/O devices, etc. by looking at debugging tools, web plugins and customised ML models.
Inhalte	In the wake of the current landscape of corporate-based Artificial Intelligence (AI) systems, a growing number of artists, academics, designers, and computer scientists have started to question the use of this technology. Technically described by Joy Buolamwini and further discussed by Ruha Benjamin, AI has lately become synonymous with racial biases. To counter that Data Poisoning is used to inject crafted data and explore the ways by which AI systems could be hacked. The most notable example of data poisoning were "One pixel attacks" which were able to craft images where a single pixel could throw off most of image recognition AI softwares back in 2018. This and other techniques have been further applied to social media platforms as a way to obfuscate users' advertisable traits. While such forms of algorithmic defence might have been successful at first, companies behind the platforms keep on finding ways to mitigate such attacks. Furthermore, poisoned data has a drawback: data streams that are patternized become highly entropic, therefore asking for further analysis.
Bibliographie /	Literature and links will be provided during the course and on the Paul Page (link

Literatur	to be updated). Leistungsnachweis Active and regular participation (min. 80% attendance) Project work In-class assignments presentations
Leistungsnachweis / Testatanforderung	Aktive und regelmäßige Teilnahme (min. 80% Anwesenheit), Projektarbeit, In-class assignments, Präsentationen
Termine	06. - 23. Dezember 2022 (ohne Montage)
Dauer	3 Wochen
Bewertungsform	Noten von A - F
Bemerkung	The course is conducted in collaboration with Yann Patrick Martins, doctoral candidate of the Make/Sende Phd programme working at the Institute Experimental Design and Media Cultures (IXDM) as Researcher. Der Kurs wird in Englisch unterrichtet. Es kann Deutsch gesprochen werden, es sollte aber Englisch verstanden werden.