NFSA Principles for Machine Learning & Artificial Intelligence Creation and Use

At the National Film and Sound Archive of Australia (NFSA) the creation and use of machine learning & artificial intelligence technologies is guided by three key strategies: **maintain trust, build effectively & transparently** and **create public value**.

From the 1930s to the present, the NFSA and its predecessor institutions have worked on and with emerging media technologies. From nitrate film to digital cinema production and streaming; from wax cylinders, shellac discs and wire audio recordings to LPs, CDs and podcasts; or from video games encoded on cassette tape, to hand-held consoles and now VR – the technical evolution of audiovisual media creation, consumption and preservation is at the core of our work.

The NFSA's Act requires us to develop, preserve, maintain and share the collection with all Australians – our core responsibility as a trusted custodian of Australia's audiovisual heritage cannot be understated. As machine learning technologies and generative artificial intelligence systems proliferate within the screen and audio production ecosystems, we have taken an informed and critical approach to these technologies. We seek to develop technologies that help people find, understand and manage the NFSA's collections to assist us with fulfilling our statutory responsibilities.

AI has the potential to unlock our vast collection of digitised and born-digital audiovisual material and to help transform the NFSA. It can significantly improve the efficiency, accuracy and impact of our archival work, by increasing the discoverability and accessibility of the collection. However, as an emerging technology and field of practice it also presents new risks and challenges which we must proactively manage. The challenge to responsibly deploy these technologies within a cultural archive is threefold: technical, cultural and legal. The following strategies frame our response to these challenges.

MAINTAIN TRUST

We maintain the trust of the public, creators and collection contributors, and NFSA staff by ensuring AI projects work within our collecting policies while paying particular care with First Nations collections and seeking consent from stakeholders and copyright owners where required. We work within the relevant Australian laws, monitor anticipated changes in laws and regulations and actively contribute to the evolution of the legal and copyright environments in which we work. We declare the use of AI and AI enabled services and contribute to AI literacy and responsible development at the NFSA and beyond.

BUILD EFFECTIVELY AND TRANSPARENTLY

We build and train machine learning systems ourselves such that these systems can understand Australian content and context. We mix commercially available and built-in-house products where appropriate, working experimentally and iteratively. We evaluate systems according to technical quality; cost and fitness; cultural safety and accuracy. We work transparently within the NFSA and collaboratively with external peers and partners and share what we learn.

CREATE PUBLIC VALUE

Our use of ML & AI improves the discoverability and usability of our collections for all, while developing AI systems that "understand Australian" so they can engage directly with our culture. We invest in the creation of localised ML models for transcription and discovery to use and share with peers in an Australian context.

Through an iterative process these principles will evolve as we learn, just as ML & AI technologies and uses evolve. We welcome feedback to ensure we continue to responsibly and thoughtfully use AI and ML technologies as we strive to share Australia's national audiovisual collection.

Further reading

The NFSA is a statutory authority established by the <u>National Film and Sound Archive Act 2008 (Cth)</u>, and the development and use of AI and ML technologies is guided by the Act in the 'endeavour to make the most advantageous use of the national collection in the national interest' (S6, ss3, b.) and to 'promote the efficient, effective and ethical use of public resources' (S6, ss3, d.). Further information about the governance of the NFSA can be found <u>here</u>.

Our development and use of AI and ML technologies is also informed by the Australian Government's <u>8 Artificial Intelligence Ethics Principles</u> and <u>National framework for the assurance of artificial intelligence in government</u>.

Some NFSA staff use the *Wasabi Air* media management platform for machine learning supported content discovery tasks. Some NFSA staff use machine learning enabled copy-proofing software for marketing and corporate communications. The NFSA is developing in-house a set of custom transcription, summarisation, entity recognition and content discovery tools suited specifically to the NFSA collection content and internal workflows.

In October 2024, the NFSA is hosting <u>Fantastic Futures conference</u>, the annual gathering for the international AI4LAM (AI for Libraries, Archives and Museums) community which draws leading technologists, academics and cultural workers together to engage, share ideas and showcase their work.