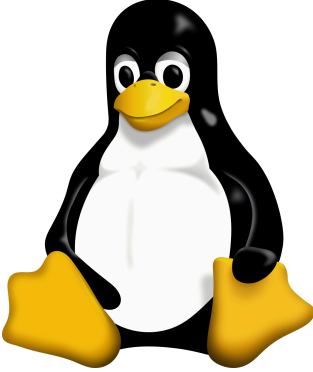





## Git Good: Open Source Case Studies

This document has information about five organisations, projects, and practices that use open source software and principles in different ways.

	<p><b>Case study 1</b></p> <p><b>Name:</b> Linux</p> <p><b>About:</b> Linux is an open-source operating system that is free to use and modify. It's known for being stable, secure, and flexible, making it popular for servers, personal computers, and many other devices.</p> <p><b>Website:</b> <a href="https://www.linux.org/">https://www.linux.org/</a></p> <p><b>Examples:</b></p> <ul style="list-style-type: none"><li>- <b>Android</b> - The operating system for most smartphones and tablets. (Apple products are unix-based)</li><li>- <b>Amazon Web Services (AWS)</b> - Cloud computing services with a significant reliance on Linux servers.</li><li>- <b>Ubuntu</b> - A popular Linux distribution used for desktops, servers, and cloud environments.</li></ul>
	<p><b>Case Study 2</b></p> <p><b>Name:</b> Arduino</p> <p><b>Description:</b> Arduino is an open-source electronics platform based on easy-to-use hardware and software, designed for creating interactive projects. It's popular for its simplicity, making it accessible for beginners and versatile for advanced users in developing various electronic prototypes.</p> <p><b>Examples:</b></p>



	<ul style="list-style-type: none"> <li>- <b>Robotics</b> - Many DIY robots and robotic kits use Arduino for controlling motors, sensors, and other components.</li> <li>- <b>Home Automation Systems</b> - Arduino is often used to create custom smart home devices, such as automated lighting, thermostats, and security systems.</li> <li>- <b>Environmental Monitoring</b> - Arduino can be employed in projects for monitoring environmental conditions, like air quality sensors and weather stations.</li> </ul> <p><b>Website:</b> <a href="https://www.arduino.cc/">https://www.arduino.cc/</a></p>
	<p><b>Case Study 3</b></p> <p><b>Name:</b> The Turing Way</p> <p><b>Description:</b> The Turing Way is an open-source guide aimed at making data science and research reproducible, ethical, and collaborative. It provides practical advice, resources, and best practices for researchers and data scientists to ensure their work is accessible and transparent.</p> <p><b>Website:</b> <a href="http://the-turing-way.org/">http://the-turing-way.org/</a></p> <p><b>Examples:</b></p> <ul style="list-style-type: none"> <li>- <b>Academic Research</b> - Researchers follow The Turing Way to make sure their work is clear and can be replicated by others.</li> <li>- <b>Open Science</b> - It helps make scientific research more open and accessible to everyone.</li> <li>- <b>Software Development</b> - Developers use The Turing Way to keep their code well-documented and easy for others to understand and contribute to.</li> </ul>



#### Case Study 4

**Name:** Open Source Investigation (OSINT)

**Description:** OSINT (Open-Source Intelligence) involves collecting and analysing publicly available information from various sources, such as social media, websites, and public records, to support decision-making in fields like security, research, and journalism. It leverages freely accessible data to gather actionable insights while ensuring ethical considerations.

**Website:** Various

#### Examples:



- **Background Checks** - Investigating individuals or organisations using publicly available data from social media, public records, and news sources.
- **Cybersecurity Threat Analysis** - Identifying and assessing cyber threats by collecting information on potential attackers, their methods, and their targets.
- **Brand Protection** - Tracking brand mentions and potential intellectual property infringements across the internet to protect corporate reputation and assets.

**Website:** Various

#### More information:

<https://blogs.icrc.org/law-and-policy/2023/12/05/deploying-osint-in-armed-conflict-settings-law-ethics-theory-of-harm/>



 <p>OpenAI</p> <p>≠ open source AI</p> <p><b>Not all 'open source' AI models are actually open: here's a ranking</b></p> <p><small>Many of the large language models that power chatbots claim to be open, but restrict access to code and training data.</small></p>  <p><b>DEFINING OPEN SOURCE AI</b></p> <p><small>We're driving a multi-stakeholder process to define an "Open Source AI", with online discussions and in-person workshops.</small></p>	<h3>Case Study 5</h3> <p><b>Name:</b> Open Source AI</p> <p><b>Description:</b> Open-source AI refers to artificial intelligence tools and models that are freely available for anyone to use, modify, and distribute. This approach promotes collaboration, transparency, and innovation in the development of AI technologies by leveraging contributions from a global community.</p> <p><b>Website:</b> Various</p> <p><b>Examples:</b></p> <ul style="list-style-type: none"> <li>- <b>Hugging Face Transformers</b> - A library for state-of-the-art natural language processing.</li> <li>- <b>Keras</b> - An open-source software library that provides a Python interface for neural networks.</li> <li>- <b>TensorFlow</b> - An open-source machine learning framework developed by Google.</li> </ul> <p>More information:  <a href="https://opensource.org/deepdive#cfp">https://opensource.org/deepdive#cfp</a></p>
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