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AI PIONEERS
Artificial Intelligence in education & training

Mastodon Platform for AI Pioneers Network

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Mastodon Platform for AI Pioneers Network

https://network.aipioneers.org/

Mastodon, an increasingly popular social media platform, has gained significant attention in recent years as an alternative to mainstream social networks. It stands out due to its unique decentralized architecture and community-focused ethos. This analysis explores Mastodon's structure, features, and its relevance, particularly in the context of fostering AI Pioneers network.

Decentralized Structure

- **Federated System**: Unlike centralized platforms like Facebook or Twitter, Mastodon operates on a federated system. It consists of a network of servers, known as "instances," each with its own rules, culture, and moderation policies. This decentralization promotes autonomy and resilience against censorship or central points of failure.
- **Interoperability**: Despite being independent, these instances can interact with each other, allowing users to follow and communicate across different servers seamlessly.

Privacy and Control

- **User Privacy**: Mastodon is committed to user privacy. It does not track or sell user data, a stark contrast to many mainstream platforms where user data is a commodity.
- **Content Control**: Users have greater control over their content and interactions. Features like content warnings and granular privacy settings empower users to manage their online presence more safely and comfortably.

Community and Moderation

- **Community-Driven**: The platform's focus on smaller, community-centric instances fosters a sense of belonging and active engagement, ideal for niche groups like AI educators and professionals.
- **Moderation**: Local moderation policies enable instances to create safe and tailored environments. This is particularly relevant in educational contexts where respectful, productive communication is paramount.

Open Source and Customization

- **Open-Source Nature**: Mastodon's open-source nature allows for transparency, security, and customization. Communities or organizations can modify the platform to suit their specific needs.
- **Adaptability:** This adaptability makes Mastodon suitable for various applications, including as a tool for professional networking and collaboration in specialized fields.

Mastodon provides a unique combination of privacy, community focus, customization, and a collaborative environment that aligns well with the needs and values of an AI Pioneers network. This makes it an attractive alternative to more mainstream social media platforms for professional networking and community building in the field of AI. The main features affected our decision for choosing were:

- **Networking and Collaboration**: Mastodon's structure is conducive to forming tight-knit networks, ideal for AI professionals and educators to share knowledge, collaborate on projects, and exchange ideas.
- **Resource Sharing**: The platform can serve as a hub for sharing educational resources, research updates, and industry news.
- **Community Building**: Its emphasis on community and user control makes it an attractive option for building a supportive and engaged educational community across Europe.

Technical infrastructure of AI Pioneers Mastodon server

Server (Cloud based instance)

- Operating System: Ubuntu 22.04
- Processor (CPU): Intel
- Memory (RAM): 4GB of RAM
- Storage: 80GB of SSD storage

Software

- Ruby on Rails
- PostgreSQL: This is the database system Mastodon uses.
- Node.js and Yarn
- Redis
- Nginx.

Network

- Server is hosted in Digitalocean’s cloud in Amsterdam datacenter.
- SSL/TLS Certificate: Let's Encryp certificate has been installed.

Additional features

- Email Server: ACP’s email server is being used
- Regular Backups every week.
- Object storage database for user content in Digitalocean’s cloud