

Analysis of the Patent Collaboration Network in Global Artificial Intelligence Technologies Based on Assignees

to a more decentralized and inclusive network. This evolution mirrors the growth of AI technologies and offers insights into the stages of technological advancement. Stakeholders, including investors, policymakers, and researchers, can leverage the findings of this analysis to make informed decisions. Identifying core collaborators and emerging trends enables strategic investments, fostering partnerships that drive innovation. Additionally, policymakers can design supportive policies that encourage collaboration and ensure equitable access to AI-related knowledge and resources. The rapid development of AI technologies raises ethical and regulatory challenges. As collaborations grow, so do concerns related to intellectual property rights, data privacy, and fair competition. While this analysis provides insights into collaboration dynamics, further research is needed to understand the ethical implications of these collaborations and the potential need for regulations to ensure responsible AI innovation [7-10].

Conclusion

The analysis of the patent collaboration network based on assignees in the global artificial intelligence (AI) technology landscape has provided a nuanced understanding of the intricate web of collaborations that underpin AI innovation. Through network analysis techniques, this study has revealed key insights into the collaborative dynamics shaping the advancement of AI technologies. By identifying core collaborators, interdisciplinary bridges, and industry-specific trends, this analysis empowers stakeholders to strategically navigate the AI landscape. Policymakers can craft informed policies to foster collaboration, investors can identify promising partnerships, and researchers can leverage insights for further exploration.

The evolution of collaboration patterns over time highlights the maturation of the AI field, from early pioneers to a diversified network of innovators. As AI continues to redefine industries and

societies, ongoing analyses will be paramount to capture emerging trends and ensure responsible innovation. While this study provides a comprehensive understanding of collaboration dynamics, ethical considerations and regulatory frameworks are essential in managing the ever-expanding AI patent landscape. As AI technologies forge ahead, continuous research will be essential to guide strategic decisions, promote responsible innovation, and shape the future of AI for the better.

References

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