



Unhallucinate Challenge: Al-Gynaecologist

Rida Jabbar (ridarao926@gmail.con)

Danish Ahmad (danish.ahmad.dev@gmail.com)





Al-Gynaecologist: Empowering Pregnant Women with Reliable Information

We believe every woman deserves access to accurate and personalized healthcare information during pregnancy. Our AI-Gynaecologist app leverages the power of Vectara's HHEM technology to minimize hallucinations and provide trustworthy guidance.



The Challenge of Hallucinations in AI-Powered Healthcare

- Language models (LLMs) are powerful tools, but they can generate inaccurate or misleading text ("hallucinations").
- Hallucinations in healthcare applications can have serious consequences.
- Vectara's HHEM model helps identify and reduce hallucinations in LLMs.



Our Solution: Al-Gynaecologist App

- User-friendly app designed for pregnant women.
- Collects information on current condition, feelings, pregnancy week, and medical history.
- Provides personalized recommendations based on data and reliable sources.
- Features like symptom tracker, information sections, and chat window with AI assistant.



Vectara's HHEM Model: Minimizing Hallucinations

- Open-source model for evaluating hallucination rates in LLMs.
- Versatile assessment for both open-source and commercial models.
- Leaderboard functionality for comparing and showcasing performance.
- Reduces hallucinations in our AI-Gynaecologist app, leading to more reliable information.



Preliminary Testing and Results

- Tested the app with information from trusted pregnancy books (1- What
 to expect when you're expecting' by heidi murkoff and sharon mazel, 2What to Expect the First Year' by Murkoff, Heidi, 3- The Modern Midwife's
 Guide to Pregnancy, Birth and Beyond: How to Have a Healthier
 Pregnancy, Easier Birth and Smoother Postnatal Period, 4- The Modern
 Midwife's Guide to the First Year).
- HHEM successfully identified and reduced hallucinations in the generated text.
- Initial results show promising potential for real-world application.



Conclusion and Future Directions

- AI-Gynaecologist app offers a promising solution for personalized and reliable pregnancy guidance.
- Vectara's HHEM model plays a crucial role in minimizing hallucinations and ensuring trust.
- We are committed to further development and testing to improve the app's functionality and reach.

