# Climate Genie: Combating Climate Misinformation

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#### **Problem Statement**

Climate change presents an urgent crisis demanding action across all societal sectors. However, the spread of climate change misinformation, especially online, impedes necessary measures. This misinformation reaches a broad audience rapidly, outpacing traditional fact-checking and expert countermeasures. As a result, misinformation can strongly influence public opinion.

## Solution: The Climate Genie Web Extension

A proposed solution to this challenge is the **Climate Genie** web extension. This tool is designed to tackle misinformation by:

- Identifying climate change falsehoods online.
- Alerting users to these inaccuracies.
- Providing debunking information and external resources.

## Target Audience

The extension aims to attract a wide user base, mainly those who consume online news and hold concerns regarding climate misinformation. The design prioritizes ease of use and minimal browsing disruption to encourage widespread adoption.

#### **Current Features of Climate Genie:**

- Misinformation Detection: Ability to recognize over 80 common arguments denning the need for action around climate change.
- Debunking: Offers users clear explanations and supporting evidence to debunk identified myths.
- Data Aggregation: Collects valuable data on misinformation spread and consumption patterns for future strategic interventions.

### **Future Development Pathways**

#### Improving Our Modeling

Potential improvements for the AI model include:

- Data Expansion: Increase training data and computational resources for better performance.
- Argument Spectrum: Enrich the model's ability to identify a broader range of denialist arguments.
- Language Support: Adapt the model for various languages to achieve international impact.

#### Research and Publications

**Academic Work** Opportunities for academic exploration involve:

- Claim Deconstruction: Analyze and dismantle emerging misinformation.
- Behavioral Studies: Examine changes in user attitudes upon exposure to the extension.

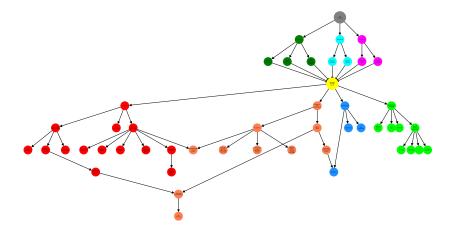


Figure 1: Future directions

• Project Documentation: Detail the creation and evolution of the extension in scholarly articles.

Report Style Publications Non-academic content creation options include:

- Trend Analysis: Report on emerging misinformation trends.
- News Outlet Breakdown: Examine the proliferation of misinformation across different media platforms.
- Topical Misinformation: Analyze misinformation in relation to current events and heated topics.

## Deployment Methods

Exploration of additional dissemination methods:

- Conversational AI: Deployment through chatbots to engage with users directly.
- Social Media Integration: Develop the extension to work within social-media sites directly.
- Mobile and Web Platforms: Development of dedicated apps and websites for easier access to people who can't use web extensions, e.g. Government workers and Mobile users

#### Future Partnerships

#### **Educational Collaborations**

• Curriculum Integration: Utilize the systematic debunking methodology as an educational resource. There is already some traction for this within the Monash School of Film, Media and Journalism.

#### Fact Checking Alliances

• Misinformation Identification: Assist organizations by providing early detection tools.

#### **Content Producers**

• **Preventive Measures:** Collaborate with writers and publishers to prevent the dissemination of misinformation from the source.

# Conclusion

The **Climate Genie** sets the stage not just as a user-centric tool but also as a foundational element for data-driven research, academic collaboration, and strategic partnerships, all of which are vitally important for fostering a well-informed public ready to confront climate change misinformation.