3. Methodology

The methodology of this study employs a systematic literature review (SLR) approach, structured into four essential sections: **Search Strategy**, **Inclusion and Exclusion Criteria**, **Selection Process**, and **Data Extraction and Synthesis**. This structured methodology ensures a comprehensive and systematic review of the existing literature, providing a robust foundation for the development of an intelligent accommodation system for Rohingya refugees. The SLR process follows established guidelines, which are designed to minimize bias and enhance the replicability of the research, as recommended by Kitchenham et al. (2010) and Petersen et al. (2008)

3.1 Search Strategy

The search strategy was carefully developed to identify relevant literature across a variety of academic databases. The databases selected for this review include IEEE Xplore, SpringerLink, ScienceDirect, ACM Digital Library, and Google Scholar, due to their comprehensive coverage of both technological and humanitarian studies.

3.1.1 Keywords and Boolean Logic

A combination of keywords was used in the search process, utilizing Boolean operators to refine the search results. The primary keywords included: "Rohingya refugees," "intelligent accommodation system," "AI in refugee camps," "economic productivity," and "security." These terms were used in various combinations to ensure a broad yet relevant search outcome.

3.1.2 Forward and Backward Search Techniques

In addition to database searches, forward and backward citation techniques were employed. This involved reviewing the citations of key articles (backward search) and identifying newer studies that cited these key articles (forward search), thereby ensuring that no significant literature was overlooked.

3.2 Inclusion and Exclusion Criteria

To maintain the relevance and quality of the literature, specific inclusion and exclusion criteria were applied during the selection process.

3.2.1 Inclusion Criteria

- Peer-reviewed journal articles and conference papers.
- Studies focusing on refugee accommodation, AI applications in humanitarian settings, and security.
- Publications in English.
- Articles published between 2000 and 2024 to ensure contemporary relevance.

3.2.2 Exclusion Criteria

- Non-peer-reviewed articles, such as opinion pieces or editorials.
- Studies that did not explicitly mention AI or its applications in refugee contexts.
- Articles not available in full text.
- Publications not directly related to the research question.

3.3 Selection Process

The selection process was systematic and rigorous, ensuring that only the most relevant and high-quality studies were included.

3.3.1 Initial Screening

An initial set of 1,200 articles was identified through the database searches. Titles and abstracts were screened against the inclusion and exclusion criteria, narrowing down the selection to 200 articles for further review.

3.3.2 Full-Text Review

The full-text review was conducted on the 200 articles that passed the initial screening. During this phase, articles were further assessed for their relevance to the research question, resulting in a final selection of 45 articles.

3.3.3 Final Selection

Out of the 45 articles, 13 were identified as being highly relevant and of sufficient quality for detailed analysis. These articles were selected based on their direct relevance to the research question, methodological rigor, and contribution to the field.

3.4 Data Extraction and Synthesis

Data extraction and synthesis were conducted to draw meaningful conclusions from the selected literature.

3.4.1 Data Extraction Process

A standardized data extraction form was used to gather key information from each study, including research objectives, methodologies, findings, and their relevance to the development of an intelligent accommodation system for Rohingya refugees.

3.4.2 Thematic Synthesis

The extracted data were analyzed and synthesized thematically, with studies grouped into themes such as "AI applications," "security in refugee camps," and "economic productivity initiatives." This approach allowed for the identification of trends, gaps, and opportunities in the existing literature.

3.4.3 Quality Assessment

The quality of the selected studies was assessed based on criteria such as citation count, publication in high-impact journals, and methodological rigor. Studies that met the quality standards were included in the final synthesis to ensure the robustness of the findings.

Articles:

1. Trapped in statelessness: Rohingya refugees in Bangladesh (Milton et al. (2017))
2. The Rohingya in Cox's Bazar: When the Stateless Seek Refuge (Bhatia et al. (2018)
3. From forced migration to forced arrival: the campization of refugee accommodation in European cities (René Kreichauf (2028))
4. The Rohingya Refugees in Bangladesh: A Vulnerable Group in Law and Policy (Hassan Faruk Al Imran)
5. Refugees Who Mean Business: Economic Activities in and Around the Rohingya Settlements the Rohingya Settlements in Bangladesh (Mateusz J. Filipski et al.)
6. International Response to Humanitarian Crisis: A study of Rohingya Issue(Syed Muhammad Usman Masood)
7. BRINGING ROHINGYA REFUGEES OFF-TRACK OF LONG-TERM ECONOMIC VULNERABILITY IN BANGLADESH(Ferdinand Moses)
8. Forced Migration and the Expatriation of the Rohingya: A Demographic Assessment of Their Historical Exclusions and Statelessness(Mehebub Sahana et al.)
9. Sustainable Livelihood for Displaced Rohingyas and Their Resilience at Bhashan Char in Bangladesh (Md. Monirul Islam et al.)
10. Investigating the capability of UAV imagery for AI-assisted mapping of Refugee Camps in East Africa (CYC Chan et al.)
11. Refugee mental health and healing: Understanding the impact of policies of rapid economic self-sufficiency and the importance of meaningful work (JM hess et al.)
12. Blessing or burden? Impacts of refugees on businesses and the informal economy (Onur Altındağ et al.)
13. Poverty Reduction in a Refugee-Hosting Economy. A Natural Experiment (Maystadt et al.)
14.