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Smart Tourism In Padang: Minangkabau Cultural And Gastronomic Recommendations Using Best First Search

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ABSTRACT

The city of Padang possesses significant tourism potential, driven by its wealth of natural attractions, Minangkabau culture, and distinctive gastronomy all of which serve as major draws for visitors. However, existing tourism information remains fragmented across various platforms, lacks systematic integration, and fails to provide destination recommendations tailored to user preferences. This situation hinders the implementation of "smart tourism," which requires intelligent, adaptive, and data-driven information systems. This study aims to develop a tourism recommendation model that integrates Padang's tourist destinations, culture, and gastronomy using the Best-First Search algorithm to generate recommendations that are more relevant, efficient, and aligned with traveler needs. The research employs an applied methodology comprising several stages: identifying and classifying data on tourist destinations, culture, and gastronomy; designing a recommendation model based on the Best-First Search algorithm; implementing the system; and testing and evaluating the model's performance using a dataset of Padang's tourist attractions. The results demonstrate that the developed model successfully integrates tourism information in a structured manner and generates destination recommendations that match user preferences based on selected criteria. Furthermore, the Best-First Search algorithm accelerates the process of finding optimal recommendation routes, thereby offering the potential to support the development of smart tourism services that are more effective, interactive, and focused on the visitor experience in Padang.

INTRODUCTION

Advancements in information technology have driven the tourism sector's transformation toward the concept of "smart tourisma destination management approach that leverages digital technology to enhance service quality, management efficiency, and the overall tourist experience. This concept integrates diverse data sources and digital services, enabling tourists to access information quickly, accurately, and in alignment with their specific needs. Furthermore, implementing smart tourism serves as a crucial strategy for boosting the competitiveness of tourist destinations in the digital era (Hendi Prasetyo & Muhammad Bachtiar Rifai, 2022). The city of Padang possesses immense tourism potential, driven by its rich natural attractions, Minangkabau culture, and distinctive gastronomy, all of which appeal to visitors. However, information regarding tourist destinations, culture, and culinary offerings remains fragmented across various platforms, making it difficult for tourists to access integrated information. This situation highlights the need for a tourism information system capable of providing destination recommendations that are fast, accurate, and tailored to user preferences (Rizki et al., 2024).

Developing tourism recommendation systems has become a key research focus, as these systems assist tourists in selecting destinations based on their travel characteristics and needs. Recommendation systems that integrate information on tourist attractions, culture, and culinary experiences are considered capable of enhancing service quality and supporting smart tourism development. Moreover, utilizing information search and filtering methods can yield more relevant recommendations, thereby increasing user satisfaction (Dwijayanti et al., 2025).

In line with these trends, bibliometric studies on smart tourism indicate a steady rise in research within this field over recent years. Research focus has shifted beyond the mere digitalization of destinations to encompass the development of intelligent systems—utilizing artificial intelligence, recommendation engines, data analytics, and decision-support tools—that foster sustainable tourism. Consequently, developing a tourism recommendation model based on the Best-First Search algorithm represents a relevant approach to supporting the implementation of smart tourism in Padang (Prasetyo & Irawati, 2025).

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LITERATURE REVIEW

West Sumatra is an Indonesian province widely recognized for its rich Minangkabau culture and culinary heritage, both of which have garnered national and international acclaim (Novesar et al., 2026). The evolution of the tourism sector in the digital era necessitates innovation in the provision of destination information—information that is not only rapid and accurate but also capable of delivering a more personalized experience for tourists. Consequently, the utilization of digital technology has become a crucial factor in enhancing the competitiveness of tourist destinations while simultaneously supporting sustainable tourism management. One rapidly advancing technology is Artificial Intelligence (AI). AI is a branch of computer science focused on developing systems capable of emulating human cognitive abilities—such as thinking, learning, analyzing, and decision-making. With the advancement of information technology, computers have evolved beyond mere data processing tools; they are now capable of pattern recognition, learning from data, problem-solving, and providing intelligent recommendations. These capabilities have led to the widespread application of AI in areas ranging from decision support systems, recommendation engines, and data analysis to optimization processes across various sectors of life (Afero, 2021b).

In the implementation of AI, the search process is a vital component for identifying the optimal solution from a range of available alternatives. The performance of a search algorithm is typically evaluated based on four key criteria: completeness (the ability to find a solution if one exists), time complexity (the efficiency regarding time required), space complexity (memory usage during the search process), and optimality (the ability to produce the best possible solution). These four criteria serve as the foundation for selecting an algorithm that aligns with the specific characteristics of the problem at hand (Perdana, 2021). The evolution of the smart tourism concept serves as a prime example of the application of AI and digital technologies within the tourism sector. Smart tourism integrates information and communication technology (ICT), data analytics, and digital services to enhance the quality of the tourist experience and improve the efficiency of destination management. Features such as historical and cultural information, digital galleries, interactive maps, event schedules, and app-based destination recommendations have proven effective in boosting tourist interest while simultaneously strengthening local cultural preservation efforts. Beyond enhancing the user experience, the implementation of ICT, GIS, and big data contributes to improving the image and competitiveness of tourism destinations (Debora Shinta Dewi et al., 2025; Taufik & Kencana, 2025).

Of complexity. Selecting an algorithm to solve the TSP requires considering data characteristics and system requirements, as each algorithm possesses distinct advantages and limitations (Perdana, 2022; (Perdana, 2021)). In addition to route optimization, smart tourism development utilizes recommendation systems to assist tourists in selecting destinations that align with their preferences. Research indicates that combining Collaborative Filtering, Content-Based Filtering, and Neural Network methods can improve recommendation accuracy, thereby ensuring the information provided is more relevant to user needs. The integration of these methods demonstrates that AI plays a role not only in route optimization but also in personalizing digital tourism services (Fahrizal et al., 2024).

In general, search methods in AI are categorized into blind search and heuristic search. Blind search operates without utilizing additional information regarding the solution's location, systematically exploring all possibilities. While it guarantees finding a solution if one exists, this approach requires significant computational time and memory as the search space becomes increasingly complex (Sari, 2022). A prime example of a blind search algorithm is Breadth-First Search (BFS), which explores nodes sequentially based on depth levels until a solution is found. Although complete, BFS tends to be inefficient for large-scale problems (Suswiantara et al., 2024). Alternatively, the Best-First Search algorithm was developed to utilize a heuristic function for selecting the node deemed most promising for reaching the goal. This approach combines the strengths of Breadth-First Search and Depth-First Search, resulting in a more selective, effective, and efficient search process. By evaluating the heuristic value of each node, the algorithm reduces the number of nodes explored, accelerates search times, and lowers memory requirements compared to uninformed search methods (Amin Fauzi et al., 2024; Afero, 2021a; Syahputra et al., 2026).

One variant of Best-First Search is Greedy Best-First Search (GBFS), which consistently selects the node with the lowest heuristic value. This strategy yields a very rapid search process, although it does not always guarantee a globally optimal solution (Yudhistira Candra, 2024). Recent research also indicates that integrating Best-First Search with machine learning can enhance the quality of heuristic functions, making the search process more adaptive and effective. This approach has been applied across various fields, including robotics, navigation, gaming, decision support systems, and AI-based tourism recommendation systems. Compared to blind search methods, heuristic search based on Best-First Search has been shown to reduce search complexity and improve computational efficiency without compromising the quality of the resulting solutions (Hao et al., 2024; Muchtar et al., 2026).

METHOD

This study employs the Best-First Search (BestFS) algorithm to determine the most efficient tourism route based on heuristic values derived from the distances between locations. Destination data—comprising location names, coordinates, and tourism categories—is processed into a weighted graph, where each destination is represented as a node and the distance between destinations as an edge. Graph weights are calculated using latitude and longitude coordinates and subsequently utilized in the route-finding process. The algorithm prioritizes the node with the lowest

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heuristic value until all destinations have been visited. To generate an optimal visitation sequence, the study adapts the Traveling Salesman Problem (TSP) concept, ensuring that each destination is visited exactly once while achieving a more efficient total travel distance. The procedural steps of the study are outlined below.

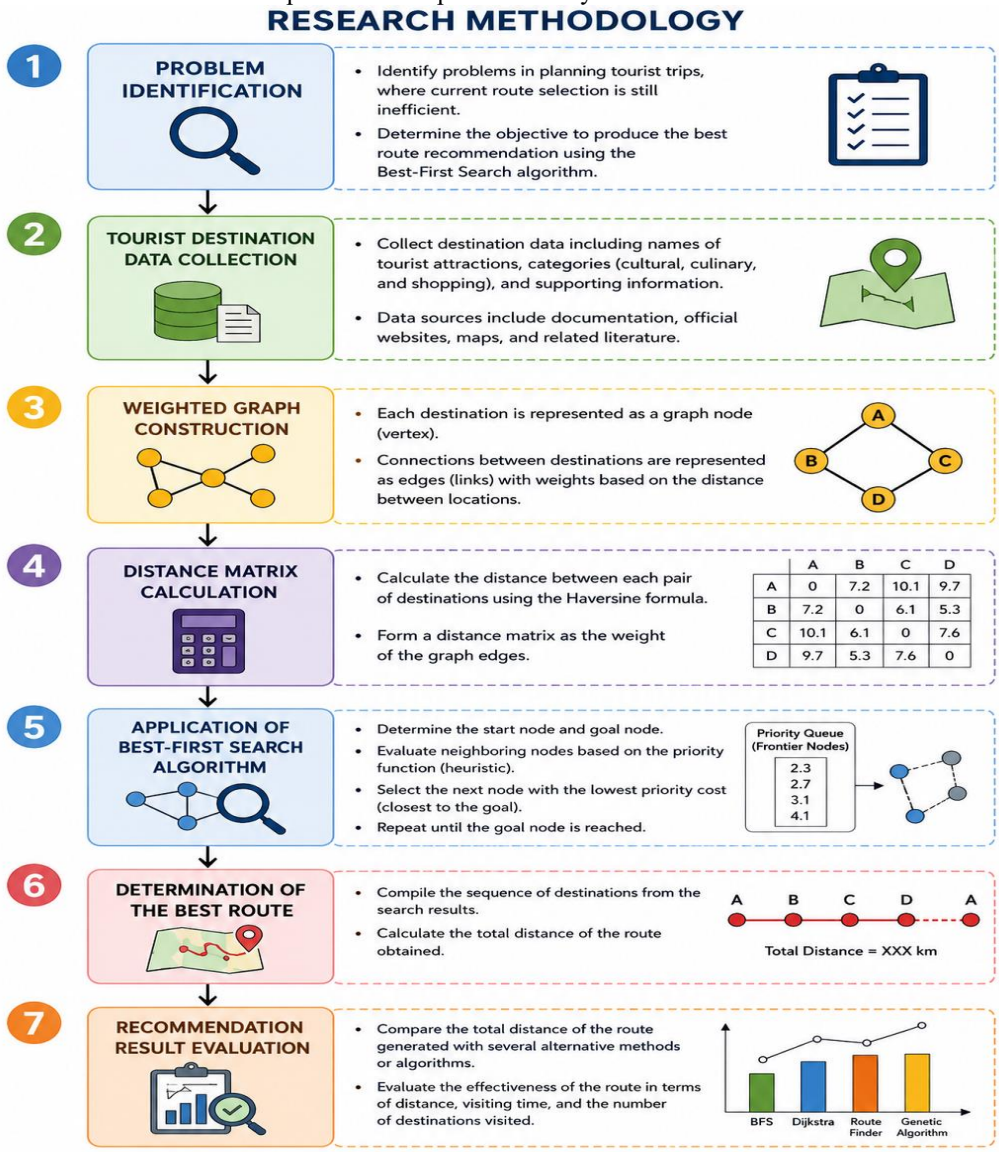


Figure 1. Research Methodology

Problem Identification

This stage aims to identify the challenges tourists face when determining the sequence of destination visits. The primary issue is that route selection is currently performed manually, resulting in inefficient travel.

Tourist Destination Data Collection

Collected data includes destination names, tourism categories, latitude and longitude coordinates, and other supporting information. Data is obtained through observation, Google Maps, and official sources from the Tourism Office.

Weighted Graph Construction

Each destination is represented as a node, while the connections between destinations are represented as edges weighted by the distance between locations. The weighted graph serves as the foundation for the route-finding process.

Distance Matrix Calculation

Distances between destinations are calculated based on geographic coordinates and organized into a distance matrix. This matrix provides the weights for each graph edge.

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Best-First Search Algorithm Implementation

The algorithm begins at the starting node, calculates the heuristic value for each node, and selects the node with the lowest heuristic value using a priority queue. This process repeats until all destinations have been visited.

Best Route Determination

Based on the search process, the system generates a sequence of destination visits and the total travel distance. The algorithm selects a more efficient path by reducing the number of nodes explored.

Recommendation Evaluation

The evaluation stage analyzes the generated routes based on total distance, computation time, and the number of nodes explored. Results indicate that the Best-First Search algorithm provides faster and more efficient route recommendations compared to non-heuristic search methods.

The Best-First Search algorithm uses the following function:

1. Best-First Search Evaluation Function Formula. The Best-First Search algorithm uses the following function:

$$f(n)=h(n) \quad (1)$$

Description: f(n) = evaluation value at node n h(n) = heuristic value, representing the estimated cost or distance from node n to the goal node.

2. A* Formula (An evolution of Best-First Search). In some studies, Best-First Search was developed into the A* algorithm using the function: $f(n)=g(n)+h(n)$ (2)

Description:

g(n) = actual cost from the start node to node n
h(n) = estimated cost from node n to the goal
f(n) = total cost used as the basis for node selection

RESULT

This research resulted in a tourist route recommendation system based on the Best-First Search algorithm, aimed at helping tourists determine a sequence of destination visits that minimizes travel distance. The research process involved seven stages: problem identification, collection of tourist destination data, construction of a weighted graph, calculation of the distance matrix, implementation of the Best-First Search algorithm, determination of the optimal route, and evaluation of the recommendations. The study produced a tourism recommendation application designed to assist tourists in planning trips to various destinations in Padang City more effectively and efficiently. The developed application provides information on tourist attractions, destination locations, and estimated travel distances between destinations, enabling users to determine more optimal travel routes. By utilizing a route-finding algorithm, the application not only provides information on tourist locations but also helps tourists select more efficient paths based on distance calculations to each destination. Consequently, tourists can save travel time, reduce transportation costs, and enjoy a more comfortable and well-planned travel experience. This research covers six categories of locations:

1) Souvenir centers
2) Culinary spots and menus
3) Shopping areas
4) Recreational and entertainment venues
5) Natural tourist attractions
6) Religious sites

The data used in this research is presented below.

Table 1. Cities in West Sumatra

No	City
1	Padang City
2	Bukittingi
3	Padang Panjang
4	Pariaman
5	Payakumbuh
6	Sawah Lunto
7	Solok
8	Batusangkar
9	Agam
10	Painan

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Table 1 lists the cities in West Sumatra Province used as research data. These ten cities serve as locations for calculating distances and determining tourist routes using the Best-First Search algorithm to identify more efficient travel paths.

Table 2. Souvenir Shop Locations

No	Souvenir Center
1	Christem Hakim
2	Mahkota Sirly Balado Chips
3	Bukittinggi Upper Market
4	Padang Main Market
5	Solok Main Market
6	Batiah/Kalamai Souvenir Center
7	Ummi Aufa Hakim
8	Silungkang Art Center
9	Payakumbuh Main Market
10	Batusangkar Main Market

Table 2 lists the souvenir centers serving as subjects of study for the tourism recommendation system in West Sumatra. There are ten souvenir locations distributed across several cities, such as Padang, Bukittinggi, Solok, Payakumbuh, and Batusangkar. Data on these locations serve as both shopping destinations and reference points for calculating distances and determining travel routes using the Best-First Search algorithm, thereby enabling tourists to obtain more efficient itineraries.

Table 3. Malls in Padang City

No	Mall
1	Basko Grand Mall
2	Damar Plaza
3	Living Plaza Padang
4	Andalas Plaza
5	Transmart Padang

Table 3 lists the shopping malls located in Padang City that serve as one of the destination categories in this study. These five malls—Basko Grand Mall, Damar Plaza, Living Plaza Padang, Plaza Andalas, and Transmart Padang—are used as destination points for calculating distances and determining routes via the Best-First Search algorithm, thereby providing more effective and efficient travel recommendations for tourists and the general public. The routes generated using the Best-First Search algorithm are presented below.

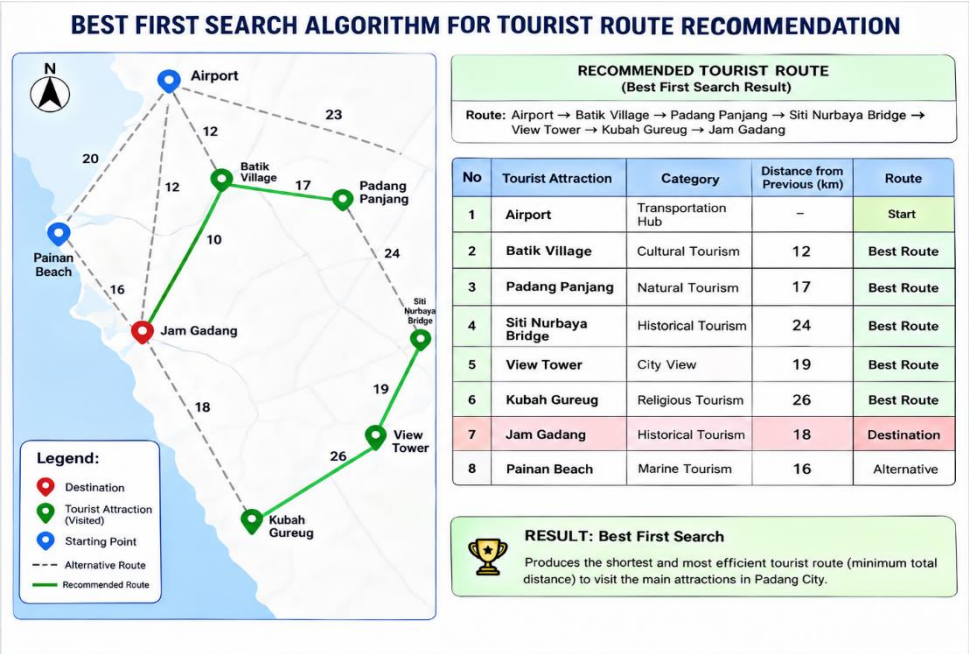


Figure 2. Best-First Search Algorithm Process

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Figure 2 presents nine natural tourist sites that represent the natural landscapes of West Sumatra Province. These locations were selected based on the diversity of their natural characteristics, ranging from lakes, beaches, valleys, and canyons to waterfalls and hilly areas. This data serves as the research subject to illustrate the distribution of natural tourist destinations suitable for further analysis—specifically regarding the determination of central points and route finding—using the Best-First Search algorithm.

Table 4. Natural Landscapes

No	Scenic Natural Landscape
1	Lake Singkarak
2	Lake Maninjau
3	Twin Lakes
4	Air Manis Beach
5	Harau Valley
6	Kelok 9
7	Kapalo Banda
8	Lubuak Paraku
9	Sianok Canyon
10	Angso Duo Island

Table 4 lists the recreation and entertainment venues serving as the subjects of the tourism recommendation system in West Sumatra. Eight destinations—comprising natural tourist areas, city parks, a zoo, beaches, and amusement attractions—were used as the dataset for tourist destinations. These locations serve as points for distance calculations and route determination using the Best-First Search algorithm, enabling the system to provide more optimal and efficient travel route recommendations for tourists.

Table 5. Recreation and Entertainment Venues

No	Recreation and Entertainment
1	Batang Tabik
2	Kandi Zoo
3	Imam Bonjol Field
4	Mifan Water Park
5	Air Manis Beach
6	Satwa Cultural Park (Kintan)
7	Siti Nurbaya Park
8	Waterboom

Table 5 lists the recreation and entertainment venues used as one of the destination categories in this study. These eight tourist locations were selected for their diverse attractions, ranging from nature sites, beaches, and city parks to zoos and amusement rides. Data on these locations served as a reference for calculating distances and determining routes using the Best-First Search algorithm, enabling the system to generate more optimal travel recommendations.

Table 6. Nature-based Tourist Attractions

No	Nature-based Tourist Attractions
1	Lake Singkarak
2	Lake Maninjau
3	Twin Lakes
4	Air Manis Beach
5	Harau Valley
6	Kelok 9
7	Kapalo Banda
8	Lubuak Paraku
9	Sianok Canyon
10	Angso Duo Island

Table 6 lists the natural tourism destinations in West Sumatra Province selected as research subjects. Ten natural tourism sites—such as Lake Singkarak, Lake Maninjau, Harau Valley, Kelok 9, Sianok Canyon, and Air Manis Beach—were chosen due to their high tourism potential and popularity among tourists. Data on these destinations serve as target points for distance calculations and route determination using the Best-First Search algorithm, enabling the system to recommend travel itineraries that are more effective, efficient, and optimal.

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Table 7. Cultural and Religious Tourism Attractions in Padang City

No.	Place	Location	Attraction / Tourism Value
1	Masjid Raya Sumatera Barat	Padang	An iconic mosque featuring unique architecture inspired by the traditional Rumah Gadang.
2	Masjid Ganting	Padang	A historic mosque in Padang and one of the city's national cultural heritage sites.
3	Masjid Al-Hakim	Padang Beach	A beautiful mosque located by the beach, offering scenic views of the sea.
4	Masjid Muhammadan	Kampung Keling, Padang	A historic mosque preserving the heritage of the Indian Muslim community in Padang.
5	Masjid Nurul Iman	Padang	One of the largest mosques and a center for religious activities in the community.
6	St. Francis Xavier Cathedral Church	Padang	The main Catholic church in Padang, featuring classical architectural elements.
7	West Indonesia Protestant Church (GPIB) Immanuel	Padang	A historic church that preserves traces of the Dutch colonial period.
8	HKBP Padang	Padang	The main place of worship for the Huria Kristen Batak Protestan (HKBP) congregation.
9	Santa Theresia Church	Padang	A church that actively organizes religious and social activities.
10	Bethany Indonesia Church Padang	Padang	A modern church serving as a center for Christian worship and community services.

Table 7 lists the religious tourism sites in Padang City that serve as one of the destination categories in this study. The selected destinations include mosques and churches notable for their historical and architectural significance, as well as their role as centers for religious activities. Data regarding these sites serve as destination points for distance calculations and route determination using the Best-First Search algorithm, enabling the system to recommend more effective and efficient itineraries for tourists engaging in religious tourism in Padang City. The application results can be viewed at http://wisatakotapadang.my.id/. Presented below are the results of the tourism recommendation application for Padang City:

Application Home Page

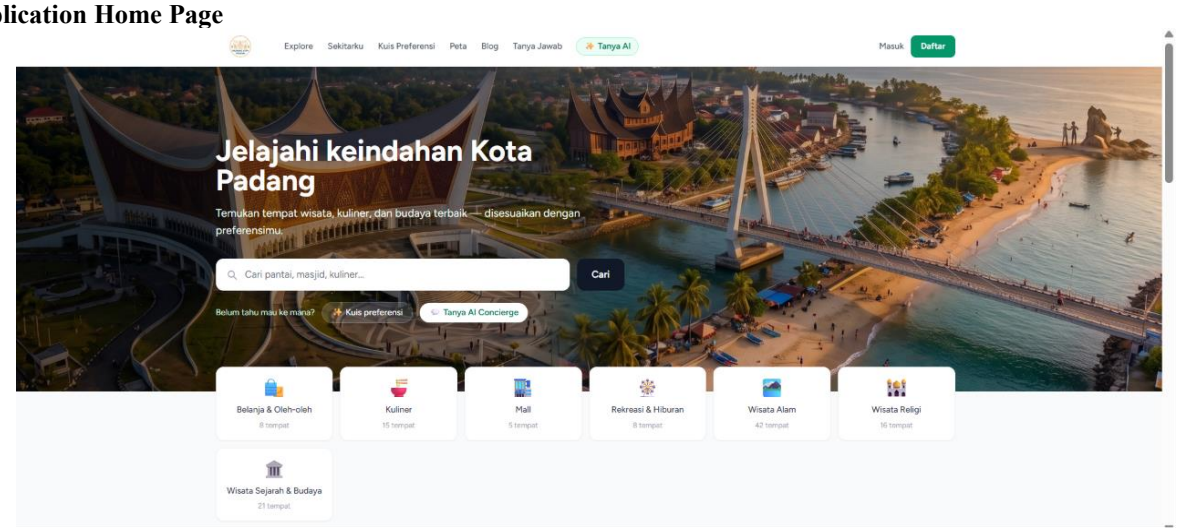


Figure 3. Initial Application

Figure 3 shows the application's main page, which provides a category-based search feature, quick access to specific menus, and a user registration feature.

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Souvenir Center

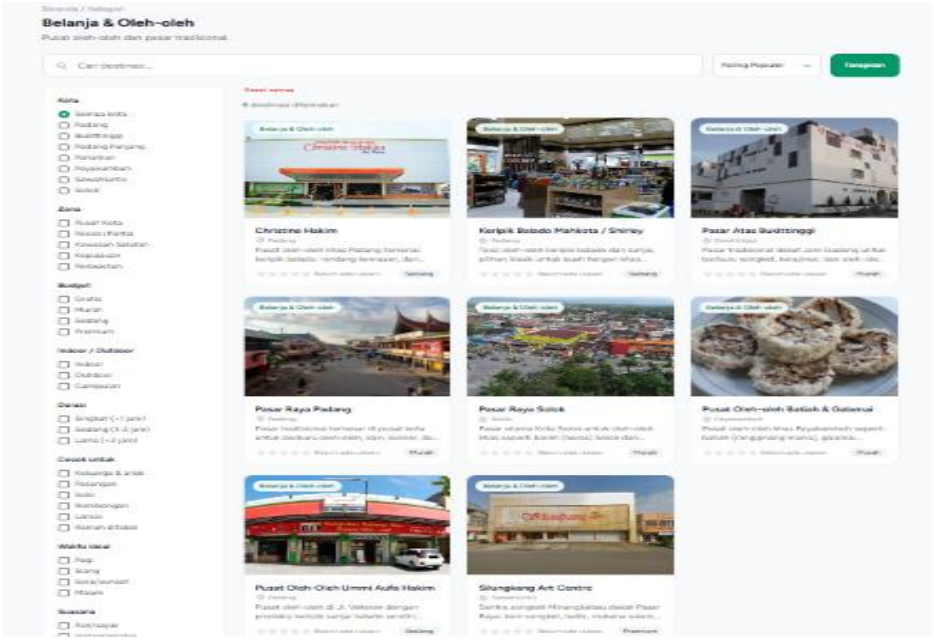


Figure 4. Souvenir Centers

Figure 4 The image displays the interface of a tourism and souvenir recommendation system. Users can select various tourism and souvenir categories via the filter menu on the left. The main section showcases a range of locations and shops, including images, names, categories, and brief information.

Culinary Spots and Menus

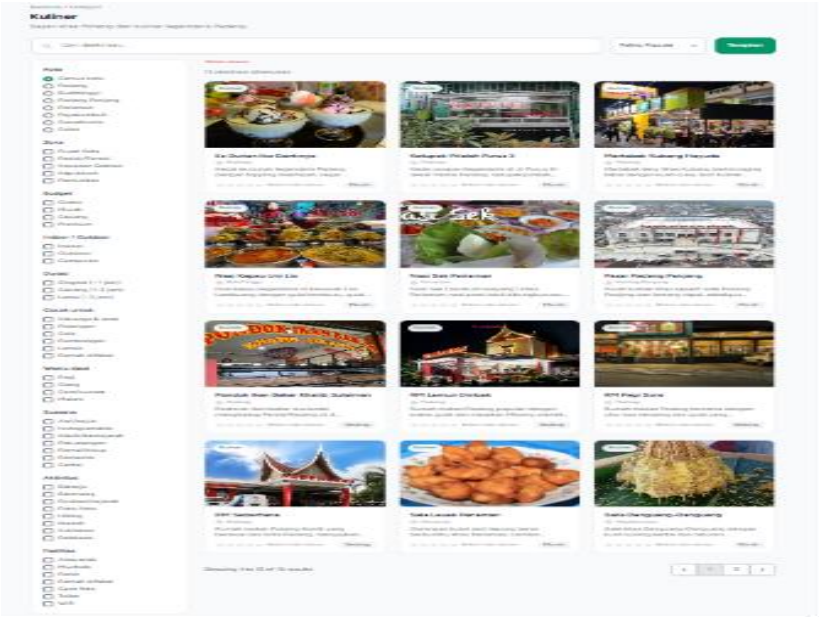


Figure 5. Culinary Spots and Menus

Figure 5 The image displays the interface of a culinary and tourism recommendation system for the city of Padang. Users can select categories via the filter menu on the left, while the main section showcases various culinary destinations and local specialties, complete with images, names, and brief descriptions. Shopping Areas.

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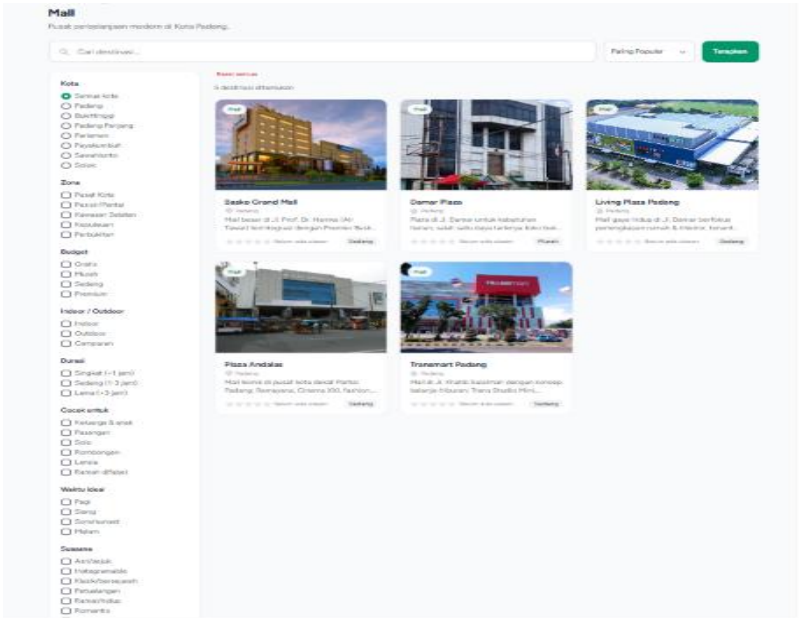


Figure 6. Malls

The image displays the interface of a culinary and tourism recommendation system for the city of Padang. Users can select categories via the filter menu on the left, while the main section showcases various culinary destinations and local specialties, complete with images, names, and brief descriptions.

Recreational and Entertainment Venues

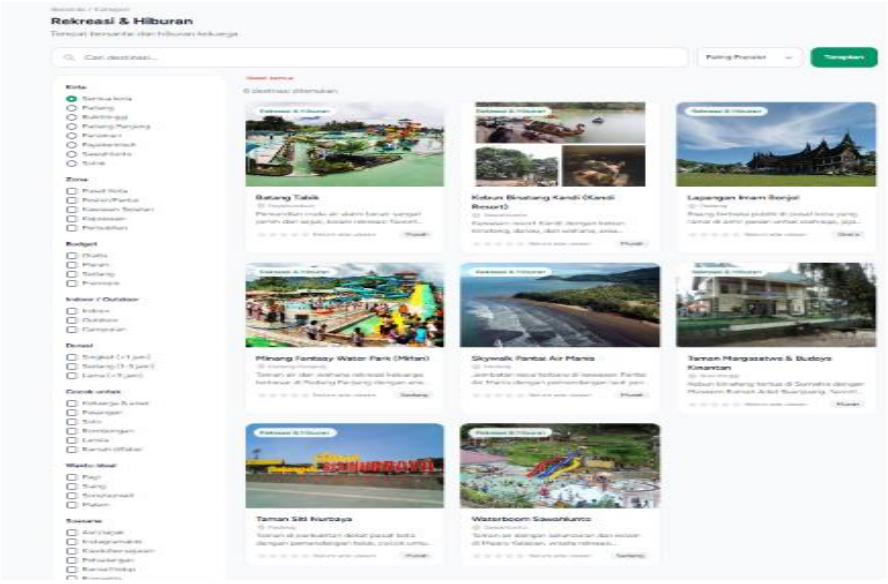


Figure 7. Recreation and Entertainment Venues

Figure 7 The image displays the interface of a culinary and tourism recommendation system for the city of Padang. Users can select categories via the filter menu on the left, while the main section showcases various culinary destinations and local specialties, complete with images, names, and brief descriptions.

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Nature Tourism Sites

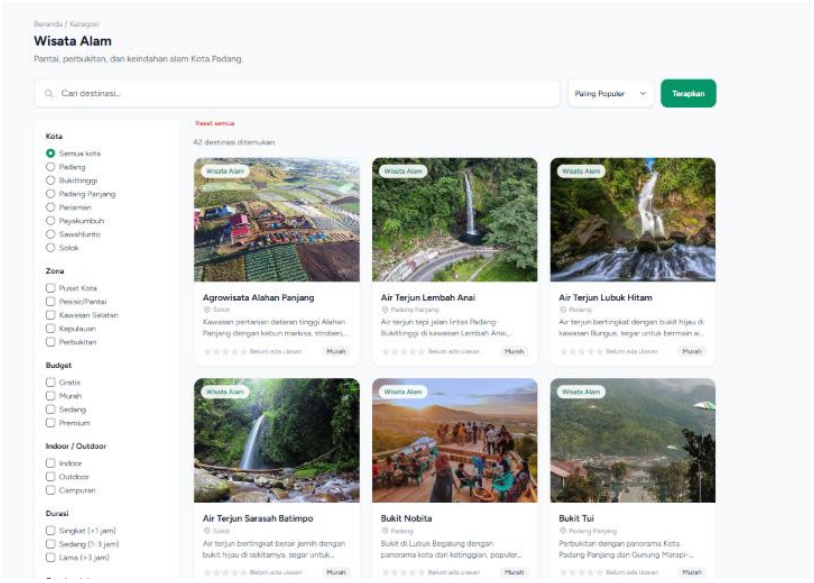


Figure 8. Nature Tourism

The image displays the interface of a culinary and tourism recommendation system for the city of Padang. Users can select categories via the filter menu on the left, while the main section showcases various culinary destinations and local specialties, complete with images, names, and brief descriptions.



Figure 9. Location Search

Figure 9 shows the main interface of the Padang City tourism recommendation application, which helps tourists quickly access comprehensive and interactive information about destinations. The application offers various tourism categories—such as nature, religious sites, culinary spots, souvenir centers, and entertainment venues—and includes a map feature for viewing locations and directions. The system employs the Best-First Search algorithm to recommend the most efficient route based on distance and features an AI assistant to provide destination suggestions and travel information. All destinations are represented as a weighted graph, where locations serve as nodes and distances as weights. Route finding is conducted by iteratively selecting the path with the shortest distance until the destination is reached, resulting in a faster and more efficient route.

DISCUSSION

Based on the research conducted, it can be concluded that a tourism recommendation system utilizing the Best First Search algorithm has been successfully developed to assist tourists in obtaining information and recommendations for tourist destinations in Padang City. The Best First Search algorithm performs searches by leveraging heuristic values, thereby determining more efficient routes to target locations. The system not only provides information on various categories of tourist destinations—such as religious sites, nature spots, recreational areas, culinary hubs,

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souvenir centers, and shopping malls—but also enables users to select destinations that align with their travel needs and preferences. Implementation results demonstrate that the system functions effectively as a tourism recommendation tool, helping tourists access destination information more quickly, effectively, and in a structured manner; thus, the research objective of developing a Best First Search-based tourism recommendation system has been achieved.

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REFERENCES

Afero, Y. (2021a). *ALGORITMA BEST FIRST SEARCH MENENTUKAN LINTASAN JALUR Keywords : Searching , Best First Search Algorithm , Bukittinggi Tourism City , Distance*. *5*(2), 138–145. DOI: 10.35145/joisie.v5i2.1717.

Afero, Y. (2021b). *Penerapan Kasus Algoritma Ascent Hill Climbing Dalam Permainan Puzzle 8 Abstrak*. *14*(2), 325–331. DOI: https://doi.org/10.51903/elkom.v14i2.508.

Amin Fauzi, M., Agus Sunandar, M. & Gito Resmi, M. (2024). Implementasi Algoritma Best First Search Pada Sistem Pengaduan Masyarakat Desa Cilandak Menggunakan Metode Waterfall Berbasis Web. *JATI (Jurnal Mahasiswa Teknik Informatika)*, *7*(6), 3210–3216. https://doi.org/10.36040/jati.v7i6.7033

Debora Shinta Dewi, Nining Yuniati, Moch Nur Syamsu & Yuliyanto Nugroho, A. (2025). Smart Tourism and Visitor Decision-Making: an Empirical Study on Mobile Application Use At Mangkunegaran Palace. *Multidisciplinary Indonesian Center Journal (MICJO)*, *2*(3), 3600–3613. https://doi.org/10.62567/micjo.v2i3.1003

Dwijayanti, I., Aesyi, U. S. & Lahitani, A. R. (2025). *Model Rekomendasi Destinasi Wisata Kreatif di Indonesia Berdasarkan Data Cuaca dan Ulasan Wisatawan*. *15*(3), 542–550. https://doi.org/10.37859/jf.v15i3.10298.

Fahrizal, D., Kustija, J. & Akbar, M. A. H. (2024). Development Tourism Destination Recommendation Systems using Collaborative and Content-Based Filtering Optimized with Neural Networks. *Indonesian Journal of Artificial Intelligence and Data Mining*, *7*(2), 285. https://doi.org/10.24014/ijaidm.v7i2.28713

Hao, M., Trevizan, F., Thiébaux, S., Ferber, P. & Hoffmann, J. (2024). *Learned Pairwise Rankings for Greedy Best-First Search*. https://doi.org/10.24963/ijcai.2024/743.

Hendi Prasetyo & Muhammad Bachtiar Rifai. (2022). Urgensi implementasi smart tourism untuk kemajuan pariwisata Indonesia. *Journal Of Tourism And Economic*, *5*(2), 147–160. https://doi.org/10.36594/jtec/5zvqmg87

Muchtar, M., Sembilanbelas, U. & Kolaka, N. (2026). *Comparison of Blind Search and Heuristic Search Algorithms in Finding Solutions to the 8-Puzzle Game : Introduction to Endemic Wallacea Animals*. *8*(1), 90–101.

Novesar, M. R., Prashanty, V. C., Khairunnisa, A., Barat, S., Andalas, U. D. & Barat, S. (2026). *Cerita budaya dalam pariwisata gastronomi di sumatra barat*. *4307*(April), 1323–1331. https://doi.org/10.54314/b97fa288

Perdana, R. W. (2021). Implementation of the Hill Climbing Method determines the shortest path to the Tanah Datar Regency tourist attraction. *International Journal of Information System & Technology Akreditasi*, *5*(3), 264–269. 10.30645/ijistech.v5i3.143.

Perdana, R. W. (2022). Expert System Troubleshooting Shortest Route Finding Using Traveling Salesman Problem (TSP). *International Journal of Information System & Technology Akreditasi*, *6*(158), 9–16. https://doi.org/10.30645/ijistech.v6i1.207.

Prasetyo, H. & Irawati, N. (2025). Smart Tourism Research Landscape 2019 - 2024: Bibliometric Insights On Trends, Collaboration, And Sustainability. *Jurnal Kepariwisataan Indonesia: Jurnal Penelitian Dan Pengembangan Kepariwisataan Indonesia*, *19*(2), 251–266. https://doi.org/10.47608/jki.v19i22025.251-266

Rizki, S. N., Yenni, Y. & Jarti, N. (2024). Perancangan Aplikasi Sistem Informasi Wisata Menggunakan Metode Algoritma Best First Search. *Bit-Tech*, *7*(2), 453–462. https://doi.org/10.32877/bt.v7i2.1845

Sari, D. P. (2022). Pemanfaatan Metode Hill Climbing Mencari Jalur Terpendek Objek Wisata Kabupaten Lima Puluh Kota. *JOISIE Journal Of Information System And Informatics Engineering*, *6*(1), 32–38. DOI: 10.35145/joisie.v6i1.2124.

Suswiantara, A., Dzakhwan, N., Fahruddin, A. & ... (2024). Penerapan Algoritma Best First Search (BFS) untuk Penentuan Slot Parkir: Application of the Best First Search (BFS) Algorithm for Determining Parking Slots. *... Indonesian Journal of ...*, *4*(October), 1606–1613. https://doi.org/10.57152/malcom.v4i4.1541.

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Syahputra, F., Sabrina, E., Chan, M. F. S., Fali, R. & Fattah, M. (2026). *Literature Review : Transitioning Usage From BFS and DFS To Heuristic Search In The Modern Ai Era*. 5(2), 15–18. https://doi.org/10.59934/jaiea.v5i2.1856.

Taufik, M. & Kencana, N. C. (2025). *Implicature of Smart Tourism in Enhancing the Reputation of Tourism Destinations*. 240–248. https://doi.org/10.55681/armada.v3i7.1681.

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