Project Description

CoMove reimagines ridesharing by placing destination discovery and social connections at the center of the transportation experience. While conventional rideshare platforms focus primarily on efficiency and convenience, CoMove recognizes that where we're going and who we're going with fundamentally transforms how we experience our journeys and destinations.

Core Concept

Rather than treating transportation as a utilitarian necessity, CoMove views each journey as an opportunity to create meaningful connections around shared interests, experiences, and destinations. Designed for an autonomous vehicle context where no driver is present, CoMove redefines the dynamic of shared mobility. Without the need for a front-facing driver's seat, vehicles can adopt inward-facing seating arrangements that encourage more natural conversation and eye contact between passengers, fostering an environment built for social interaction.

The platform serves as a well-connected and knowledgeable host that understands which people would enjoy traveling together based on what they like, where they're headed, what they know, and what they hope to discover. Users can select from two ride modes: "Quiet Mode" for those who prefer minimal interaction, and "Open to Chat" for those open to conversation. They can also specify their intent for using the platform, whether to meet people, seek local recommendations, or explore new places together, feeding into a context-aware matching system that brings compatible travelers together.

Aligning social intention with journey context, CoMove imagines a future of autonomous shared mobility not as a solitary, task-oriented experience but a shared space for spontaneous connection, community, and exploration.

Community Ecosystem

Communities form the social backbone of CoMove, organized around shared interests (Coffee Enthusiasts, Live Music Lovers), locations (Downtown Explorers, Riverside Regulars), or activities (Weekend Hikers, Festival Followers). These communities serve multiple purposes:

1. They provide a context for connection beyond one-time rides
2. They establish trusted networks for authentic destination recommendations
3. They create opportunities for users to build reputation and expertise

4. They facilitate group planning for destination-based experiences

Within communities, users can earn recognition through positive interactions, becoming acknowledged as local experts for specific areas or destinations. This reputation system creates incentives for sharing knowledge and creating positive social experiences, while also helping the matching algorithm identify ideal knowledge-sharing combinations.

AI Matching Algorithm

The heart of CoMove is its context-aware matching algorithm that balances multiple factors to create optimal ride experiences:
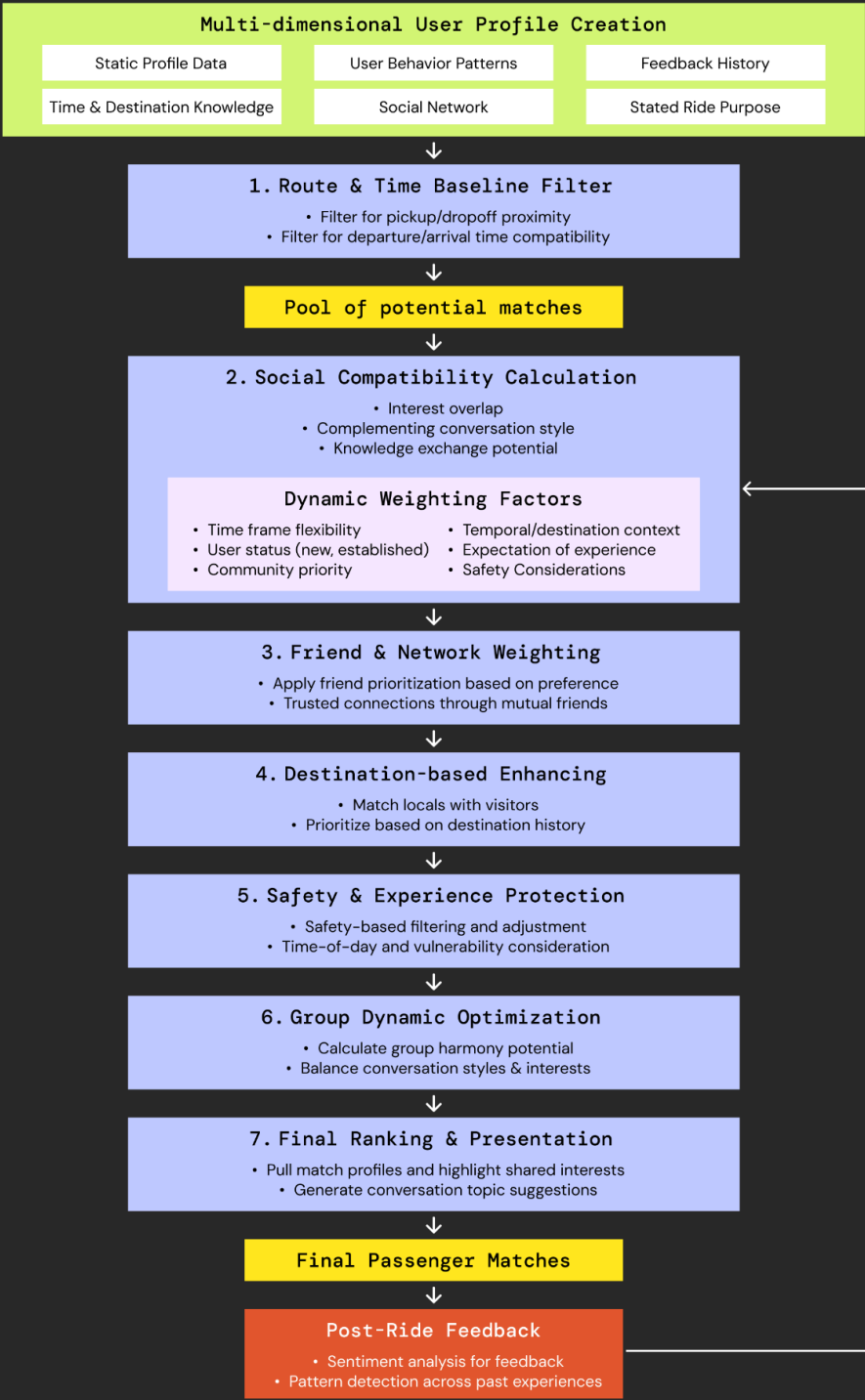
The system begins with a comprehensive user profile incorporating traditional elements (demographics, interests) alongside unique factors like destination expertise, community affiliations, and conversational style preferences. For each potential match, it calculates a weighted compatibility score that considers:

- Route and temporal compatibility
- Social connection potential
- Safety and trust factors
- Destination knowledge complementarity
- Community alignment
- Group dynamics for multi-passenger rides

The algorithm adapts dynamically based on contextual variables like time of day, stated ride purpose, and destination characteristics. For instance, weekday morning commutes might prioritize route efficiency, while weekend leisure trips would emphasize social compatibility and destination discovery.

The system learns continuously through the app's feedback loop. Beyond simple ratings, it analyzes patterns in successful group combinations, conversation topics that resonated, and destination recommendations that led to new experiences. This allows the system to optimize its matching over time, becoming increasingly adept at creating memorable shared journeys.

CoMove AI Matching Algorithm Flow

Multi-dimensional User Profile Creation

Static Profile Data	User Behavior Patterns	Feedback History
Time & Destination Knowledge	Social Network	Stated Ride Purpose

↓

1. Route & Time Baseline Filter

- Filter for pickup/dropoff proximity
- Filter for departure/arrival time compatibility

↓

Pool of potential matches

↓

2. Social Compatibility Calculation

- Interest overlap
- Complementing conversation style
- Knowledge exchange potential

Dynamic Weighting Factors

- Time frame flexibility
- User status (new, established)
- Community priority
- Temporal/destination context
- Expectation of experience
- Safety Considerations

↓

3. Friend & Network Weighting

- Apply friend prioritization based on preference
- Trusted connections through mutual friends

↓

4. Destination-based Enhancing

- Match locals with visitors
- Prioritize based on destination history

↓

5. Safety & Experience Protection

- Safety-based filtering and adjustment
- Time-of-day and vulnerability consideration

↓

6. Group Dynamic Optimization

- Calculate group harmony potential
- Balance conversation styles & interests

↓

7. Final Ranking & Presentation

- Pull match profiles and highlight shared interests
- Generate conversation topic suggestions

↓

Final Passenger Matches

↓

Post-Ride Feedback

- Sentiment analysis for feedback
- Pattern detection across past experiences

Continuous Learning Feedback Loop

In-Vehicle Experience

CoMove transforms the in-vehicle experience from passive transit time to active engagement through a shared screen system. This screen serves multiple purposes:

1. **Conversation Facilitation:** It highlights shared interests, suggests relevant topics, and provides conversation starters based on the specific passenger combination
2. **Destination Exploration:** It displays information about the destination and points of interest along the route, allowing local experts to share knowledge
3. **Group Activities:** For longer journeys, it offers interactive elements from simple icebreaker games to collaborative playlists
4. **Ambiance Control:** Passengers can collaboratively adjust vehicle settings for optimal comfort

The system is designed to support rather than replace human interaction, providing subtle cues during natural conversation flows.

IN-RIDE SHARED SCREEN

DESTINATION DISCOVER

ACTIVITIES

* this background image is ai-generated

Post-Journey Connection

CoMove extends the experience beyond the ride itself through a post-journey feedback and engagement system. Users can:

1. Save connections made during rides to their friend network
2. Add discovered destinations to their personal collection
3. Create recommendations and guides for communities
4. Plan future journeys with people they connected with
5. Track their exploration through an interactive map of visited places

This creates a continuous cycle where each journey potentially leads to new connections, destinations, and future experiences, building a rich social graph centered around the experiences.

User Growth Journey

A typical user's journey within CoMove might follow this trajectory:

1. **Transportation Focus:** Initially using the platform primarily for practical transportation
2. **Social Discovery:** Experimenting with social rides and discovering the value of local recommendations
3. **Community Engagement:** Joining communities aligned with personal interests
4. **Knowledge Sharing:** Beginning to share favorite places and recommendations
5. **Reputation Building:** Earning recognition as a knowledgeable community member for specific destinations
6. **Experience Creation:** Planning group journeys to favorite destinations
7. **Platform Advocacy:** Inviting friends and becoming a recognized community member

This progression creates natural growth loops as users transition from passive transportation consumers to active community contributors.

Business and Social Impact

Beyond creating a compelling user experience, CoMove offers significant potential for positive impact:

1. **Local Discovery:** Driving traffic to smaller, locally-owned businesses through authentic recommendations
2. **Community Building:** Fostering real-world connections in an increasingly digital era
3. **Knowledge Sharing:** Creating platforms for locals to share expertise with visitors
4. **Transportation Efficiency and Sustainability:** Reducing individual vehicle usage through more appealing shared rides

5. **Neighborhood Exploration:** Encouraging people to venture beyond familiar areas and discover new neighborhoods

In its efforts of transforming transportation from a necessity of an individual into a connected discovery opportunity for many, CoMove creates value for individual users, local businesses, and communities as a whole.