TrojanNAV

AI-Powered Academic & Career Planning Platform

Project Information

Project Name	TrojanNAV
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Target Users	USC Marshall MSBA Students
Project Type	AI-Powered Platform
Status	Prototype & Development Phase

Executive Summary

TrojanNAV is an AI-powered platform designed to transform the academic and career planning experience for USC Marshall MSBA students. By consolidating fragmented resources and providing personalized, data-driven recommendations, TrojanNAV empowers students to make informed decisions about course selection, workshop attendance, and professional networking.

Problem Statement

Current State:

Students face significant challenges navigating their academic journey at USC Marshall:

- **Scattered Information: Resources are dispersed across multiple platforms (LinkedIn, RateMyProfessor, course websites, email announcements), making it difficult to get a comprehensive view.** Students waste hours searching through different sources without knowing if they have found all relevant information.
- **Unclear Course Value:** Course descriptions are often vague, syllabi are rarely available upfront, and choosing electives feels like guesswork. Students struggle to understand which courses will provide the technical skills needed for their target roles.
- **Workshop Overload:** Students receive numerous workshop invitations but have no clear way to assess which ones are actually valuable for their career goals, leading to missed opportunities or wasted time.

- **Ineffective Alumni Networking:** It’s hard to identify which alumni are most relevant to reach out to based on career goals and background. Students often send connection requests blindly and receive no response, leading to frustration.

Impact:

This fragmented experience creates anxiety, inefficiency, and uncertainty. Students know the industry or role they aspire to, but feel powerless when trying to navigate scattered and unstructured resources. The constant trial-and-error wastes precious time that could be spent on skill-building and career preparation, ultimately affecting their confidence and job placement success.

User Persona

Emily Hart - First Year MSBA Student

Age	23
Occupation	1st Year MSBA Student
Location	Los Angeles, CA
Status	Early-stage Career Explorer

About:

Emily just started her MSBA journey at USC Marshall. She feels excited but also overwhelmed by the technical requirements and wide range of electives. Her goal is to maximize her time in order to establish a clear career path.

Frustrations:

- Worries about missing key workshops and opportunities (events and alumni connections)
- Overwhelmed by scattered resources (LinkedIn, RateMyProfessor, course sites)
- Unsure which electives or professors align with her desired role
- Struggles to connect with the right alumni and expand their social network

Personality Traits: Anxious → Excited → Hopeful → Confident (journey arc)

Solution Overview

TrojanNAV addresses these challenges through an integrated, AI-powered platform that provides:

- **Personalized Course Recommendations:** AI analyzes student background, skills, and career goals to suggest tailored elective combinations with integrated professor reviews from RateMyProfessor.
- **Curated Workshop Suggestions:** Platform recommends relevant workshops based on skill gaps and career objectives, with clear value propositions.
- **Smart Alumni Matching:** AI suggests relevant alumni based on student’s background, target industry, and role, highlighting career paths, achievements, and common interests with integrated contact options.
- **Unified Planning Dashboard:** Centralized calendar integrating courses, workshops, and networking opportunities with progress tracking.

Key Features

1. Profile Setup & Personalization

Students input their:

- Educational background and current skills
- Target industry and desired role
- Interests and learning preferences

The AI combines this information with historical student data to create personalized learning pathways.

2. AI-Powered Course Recommendations

- Suggests elective combinations aligned with career goals
- Displays required skills for target roles and how courses address them
- Integrates RateMyProfessor ratings and peer reviews
- Provides transparent rationale for each recommendation

3. Workshop Discovery & Recommendations

- Identifies workshops that fill specific skill gaps
- Shows workshop value propositions and learning outcomes
- Links workshops to alumni who attended and their career outcomes
- Sends timely reminders for relevant upcoming events

4. Alumni Network Expansion

- AI matches students with relevant alumni based on:
  - Similar backgrounds and interests
  - Target industry and role alignment
  - Career trajectory relevance
- Displays alumni career paths, achievements, and shared interests

- Provides integrated contact options (LinkedIn, Email)

5. Integrated Planning Calendar

- Unified view of courses, workshops, and networking events
- Progress tracking with milestones and achievements
- Visual skill development roadmap

Technical Architecture

Core Technologies

- **AI Recommendation Engine:** Machine learning algorithms analyze student profiles, historical data, and outcomes to generate personalized recommendations
- **Data Integration Layer:** Aggregates data from course catalogs, workshop databases, RateMyProfessor, and alumni networks
- **Modular Architecture:** Scalable design allows phased rollout of features (courses → workshops → alumni)
- **User Interface:** Intuitive dashboard with transparent recommendation rationale to build user trust

Use Cases

Scenario 1: First-Year Student Course Planning

Persona: Emily, first-year MSBA student with business background
Context: Emily wants to pursue a career in Data Analytics but isn’t sure which electives will provide the right technical skills.
Action: She enters her background, target role, and interests into the platform.
System Response: The platform analyzes her input and past student data, then recommends a tailored set of electives, professor reviews (RateMyProfessor integration), and relevant skill workshops.

Scenario 2: Second-Year Alumni Networking

Persona: David, second-year student pivoting to Marketing Analytics
Context: David has completed core courses but needs industry insights and career advice.
Action: He logs into the platform and indicates his target role and industry.
System Response: The platform recommends alumni who successfully transitioned into Marketing Analytics and suggests relevant workshops.

Scenario 3: Workshop Discovery

Persona: Emily
Context: Emily wants to improve her SQL and data visualization skills but isn’t sure which workshops are most effective.
Action: She browses the platform’s recommended workshops aligned with her target role.
System Response: The platform highlights relevant workshops and shows alumni profiles of those who attended similar workshops and successfully advanced into related industries.

Success Metrics

User Engagement

- Active monthly users (target: 80%+ of MSBA cohort)
- Average session duration and frequency
- Feature adoption rates (courses, workshops, alumni networking)

Student Outcomes

- Student confidence levels (pre/post surveys)
- Job placement success rates
- Skill development progress
- Successful alumni connections made

Platform Performance

- Recommendation accuracy (user ratings)
- Time saved per student (vs. manual research)
- User satisfaction scores

Constraints & Challenges

Data Access Limitations

- **Challenge:** No direct access to USC course catalogs, alumni databases, or career center datasets
- **Mitigation:** For prototype phase, use simulated data generated by AI. Post-pilot, establish data partnerships with USC Career Center and Alumni Office.

Privacy & Data Security

- **Challenge:** Student and alumni information contains sensitive personal data
- **Mitigation:** Implement strict data privacy protocols, anonymize data where possible, obtain explicit user consent, comply with FERPA regulations

Development Timeline

- **Challenge:** Limited timeframe within academic semester
- **Mitigation:** Focus on MVP with core features (course recommendations, basic workshop info), plan phased rollout for additional features

Future Roadmap

Phase 1: Pilot (Current)

- Launch MVP with MSBA students
- Collect user feedback via ratings and comments
- Refine recommendation algorithms

Phase 2: Data Integration

- Establish partnerships with USC Career Center and Alumni Office
- Integrate real-time data from LinkedIn and internal databases
- Expand alumni matching capabilities

Phase 3: Program Expansion

- Extend to USC Marshall MBA program
- Add support for other graduate programs
- Develop cross-program networking features

Phase 4: Institutionalization

- Official integration into Marshall systems
- Include in student onboarding process
- Continuous improvement based on user data and outcomes

Value Proposition

For Students

- **Efficiency:** Save hours of trial-and-error research with all resources in one place
- **Personalization:** Receive recommendations tailored to individual backgrounds and career goals
- **Confidence:** Make informed decisions backed by data and peer experiences
- **Engagement:** Track progress with milestones and achievements, acting as a just-in-time career coach

For USC Marshall

- **Enhanced Student Experience:** Reduce frustration and increase satisfaction with academic journey
- **Improved Outcomes:** Better job placement rates through informed course selection and networking
- **Stronger Community:** Facilitate meaningful connections between students and alumni
- **Data-Driven Insights:** Understand student needs and preferences to improve program offerings

Conclusion

TrojanNAV transforms the student experience at USC Marshall by consolidating fragmented resources into a single, intelligent platform. By providing personalized recommendations for courses, workshops, and networking opportunities, we empower students to make confident, informed decisions about their academic and career paths. This not only saves time and reduces anxiety but also strengthens the Marshall community and improves student outcomes. Through phased development and continuous refinement based on user feedback, TrojanNAV has the potential to become an essential tool for every Marshall student.

Appendix

References

- Project Presentation Slides
- Product Requirements Document (PRD)
- Figma Prototypes and Wireframes
- User Survey Results

Contact Information

For questions or feedback about this project, please contact the TrojanNAV team.