We are Team Momo
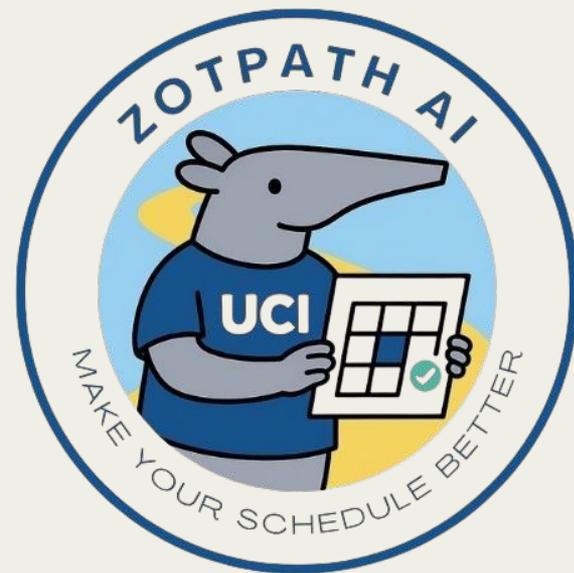
Team members: Yinhao Zhu, Zhouheng Tao, Siming Du, Tong Wu, Gabriela Quintana, Yifan Wu

ZOTPATH AI

MAKE YOUR SCHEDULE BETTER

Introduction to *ZotPath AI*

1.
What is ZotPath AI

- Web-based academic-planning platform built for UCI students.
- Combines real-time catalog data with machine-learning advice.

2.
Why it is important

- 30,000 + students share very limited advising slots—planning bottlenecks delay graduation.
- Manual checks miss hidden conflicts and prerequisite gaps.

3.
Our motivation

- We've all struggled with WebReg and last-minute class shuffles.
- Turning our own pain points into a tool that helps every Anteater stay on track.

Our goal: a tool that cuts advising load, reduces stress, and boosts on-time graduation odds with data-driven recommendations. It should be available 24/7, ready when you are.

ZotPath AI: What We're Building

AI-Powered Academic Planning Tool
　　　ZotPath AI helps UCI students take control of course planning and graduation tracking.

Core Features:

📅 **Visual Schedule Builder:** Auto-detects class conflicts

✓ **Prerequisite Checker:** Real-time alerts

📊 **AI Course Recommendations:** Based on major, interests & workload

🔍 **Course Difficulty Forecast:** GPA trends & feedback

🎯 **Graduation Confidence Score**

👥 **Student Community Sharing:** study plans and tips

Built for: Security, Accessibility, and Multi-Device Use

How Features Work Together

Intelligent Data Flow

Student Input → AI Processing → Personalized Recommendations

Smart Decision Support

Right information appears at the right time - no separate searches needed

Unified User Experience

One login, one platform - each step builds naturally on the previous

Real-Time Intelligence

Live UCI data integration with instant conflict detection

Technical Achievement & Integration

Robust Architecture & Real-World Integration

Robust System Architecture

- **Cloud-hosted web application** using AWS/GCP

- **RESTful API architecture** with MongoDB database

- **99% uptime target** with automated monitoring

Real-World UCI Integration

- Direct integration with **UCI course catalog**

- **Real-time sync** with WebReg system

- Admin interface for **staff-managed course updates**

Measurable Impact

- **1,000+ active users** in first 6 months

- **80%+ user satisfaction**

- **15% reduction** in counselor meeting time

- **3% increase** in on-time graduation rates

Cost-Efficiency & ROI

- **$28,840 development** budget

- **$9,275 annual operating** cost

- Long-term ROI via enhanced student outcomes

Challenges & Solutions
Overcoming Real-World Obstacles

👬 People/Process Challenges

Low Survey Participation
Partnered with student orgs + offered
incentives

Student Team Turnover
Strong docs + skill sharing + structured
handoffs

Hidden Costs & Budgeting
10–15% buffer + market research

💻 Technical/System Challenges

AI Accuracy
A/B testing + validation on historical
UCI data

Data Security & Privacy
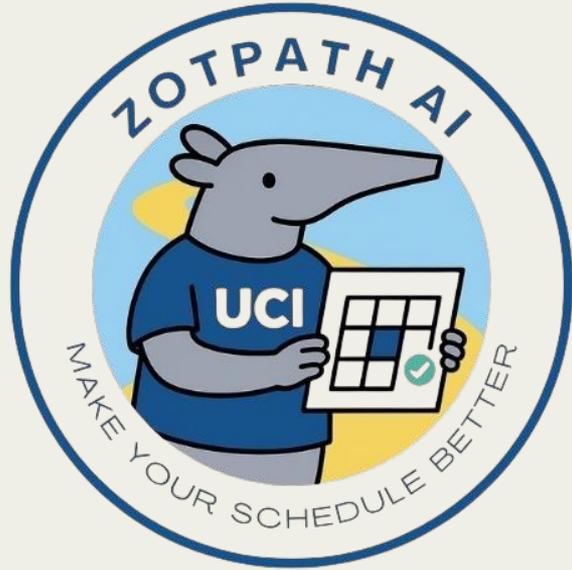Encryption, audits, UCI policy compliance

Scalability at Peak Times
Cloud auto-scaling + backups + uptime
monitoring

Lessons Learned

- Learning Project Management Principles vs actually applying them on this startup project
- Working asynchronous and having accountability for individual collaboration to project
- Open and frequent communication promoted support and reassurance when working

ID	Category	Situation	Recommendation
001	Maintenance and Iteration	Student developers graduating, needing to continuously cycle through workers	Documenting development processes thoroughly and have diverse levels of student workers, bettering our resource planning for long-term project sustainability
002	Launch Phase	Gaining trust with student body	Establishing credibility with stakeholders/customers by having a reliable system that uses optimal communication methods to promote to our audience
003	Launch Phase	Risk of overwhelming our servers or system lag	Design the project for scalability from the beginning, aligning with risk management practices to identify technical risks early

Thank You! 😃