

# Oscar AI

AI Summer Camp  
Cal Poly DxHUB



Hartnell College Counseling and Guidance

# Career Pathways: A Chatbot for Students



# PROBLEM

**“Up to 70% of students under age 25 enter college without a declared major—and over half of undergraduates change their major at least once.”\***

- No structured guidance for undecided students
- Career assessments are formal and intimidating
- Program info exists in static, disconnected formats
- Students take extra units and delay graduation

\*National Center for Education Statistics



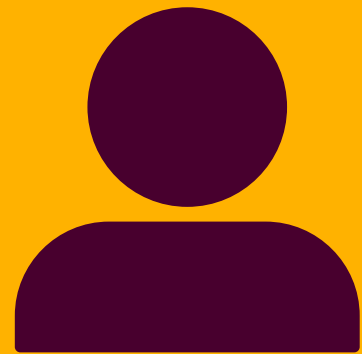
# GOAL

## Friendly chatbot that helps undecided students

- Create alternative to intimidating standard career assessments
- Match student interests to specific Hartnell college programs and career paths
- Show degree requirements, timelines, and transfer options
- Reduce time-to-completion by helping students choose appropriate majors early
- Support multiple credential types (certificates, AA degrees, transfer programs)

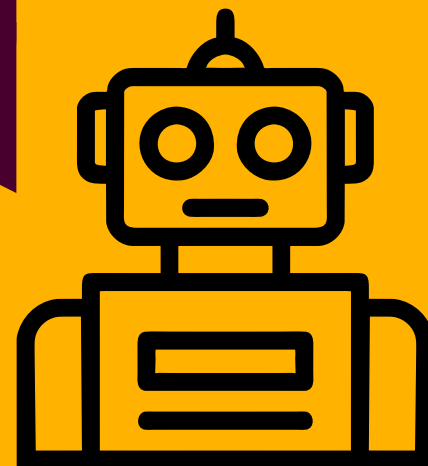


# HOW IT WORKS



I like solving problems and helping people.

You might enjoy Nursing or Emergency Medical Services. Want to see the path to get there?



## Discover Interests

Chatbot asks open-ended, low-pressure questions



## Match to Majors

Shows interest clusters and asks follow up questions



## Show Pathways

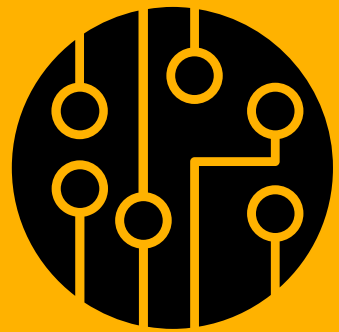
Displays programs from Hartnell All Degrees & Certificates



## Next Steps

Can expand to timelines & transfer info

# TECHNICAL SPECS



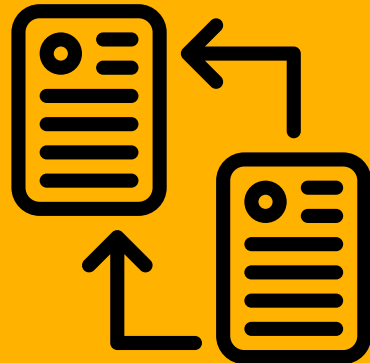
## Foundation Model

Claude 3.5 Sonnet v2 via Amazon Bedrock



## Front End User Interface

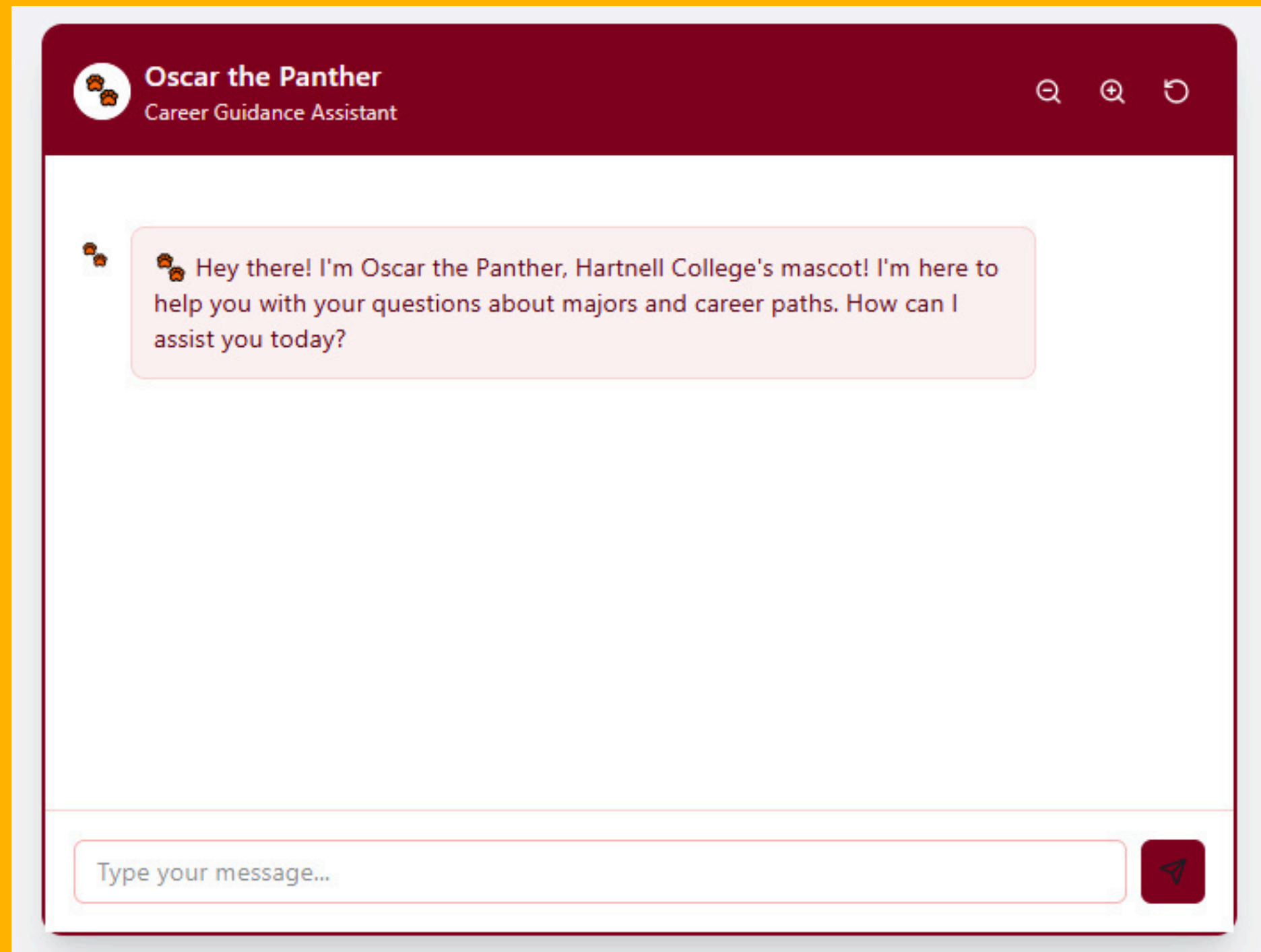
Streamlit + CSS (future HTML, JavaScript, and NextJS)



## Data Integration

AWS Knowledge Bases, AWS S3 Bucket, and LangChain

# DEMO



# **FUTURE OPPORTUNITIES**

**Expand the knowledge base to include transfer requirements and pathways for CSUs and UCs**

**Implement a more personalized front-end for Hartnell**

**AI Agents to make appointments with counselors**

**Highlight student projects in specific major areas**

**Enhance and roll out solutions for other CCC**





# What questions do you have?

## Team

**Joaquin Arredondo** - Cal Poly SLO

**Patricia Chaparro Chacon** - East Los Angeles College

**Gudrun Enger** - Skyline College

**Giang Thanh Nguyen** - Evergreen Valley College

**Harish Thanigaivel** - De Anza College