# OPT Volunteers should read the entire document (Except the suggested projects)

To get involved with volunteer OPT work join the NU Skunkworks Slack and then the #opt channel.

https://join.slack.com/t/neuaiskunkworks/shared\_invite/zt-9h3ckfg2-YR2h6xsTURhLKK RIQpxSzQ

Opt related questions should be asked in the Slack #opt channel

All volunteers can reach out to the heads of special projects to request joining a special project or reach out to TAs to join a default project

TA hours (for default projects). The default projects are making educational videos on STEM for the Humanitarians ai YouTube channel.

https://docs.google.com/spreadsheets/d/1s1PvdWhTvsgrNALQIGw2rZUMj1Ak\_A3EHrzsD3ewHMU/edit?usp=sharing

Volunteers are expected to make a high quality tutorial teaching something in STEM roughly -10 minutes in length every week. Any topic in STEM is OK and there are some suggested topics at the bottom of this document. There must be code associated with all tutorials. All code MUST follow a style guide like the **Google Python Style Guide** https://google.github.io/styleguide/pyguide.html

All text must be cleaned up and rewritten with an LLM tool like ChatGPT (e.g ChatGPT can you clean up the following text?)

There are many incomplete notebooks that can be used as a started point in the Ai Skunks Skool repository https://github.com/aiskunks/Skunks\_Skool/

Special Projects for Humanitarians

For the special projects you MUST be accepted by the project leaders

Work with Dev on Nirvana Labs OpenSource projects and integration with the Humanitarians.ai website

Make an appointment with Dev here Calendly.com/0xdevshah

(Dev add some details)

## **CaseCrackers: A User-Centric Management Consulting Assistant**

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Advisor: Komal Suryan

#### **Current Product:**

The current product is a multifaceted Al-driven platform called "Case Cracker." Its primary purpose is to generate new case studies across various styles and topics using Generative Al. Case Cracker offers a comprehensive suite of features tailored to individuals studying management or preparing for job interviews. It combines case study generation, graphical analytics, a case library, and an integrated chatbot interview experience.

### **Importance to the Target Audience:**

- 1. Management Students and Professionals: Case Cracker is invaluable to management students and professionals looking to enhance their analytical and problem-solving skills. It provides them with a wide range of case studies to practice on, helping them prepare for real-world business challenges.
- 2.Job Seekers: For individuals preparing for job interviews, Case Cracker offers an automated interview simulation through its chatbot feature. This helps job seekers practice their interview skills, receive feedback, and improve their performance.

3.Educational Institutions: Educational institutions can benefit from Case Cracker by integrating it into their curriculum to enhance the learning experience for students studying management and related disciplines.

#### **Key Product Features:**

- 1.Case Study Generation: Case Cracker uses Generative AI to create new case studies on any topic provided by the user. It can generate cases in various styles, such as problem-solving, decision-making, and strategic analysis.
- 2.Graphical Analytics: The platform offers a built-in tool for generating graphical representations and analytics for the case studies. Users can visualize data, trends, and insights, making it easier to understand and present their findings.
- 3.Case Library: Case Cracker maintains an extensive library of pre-existing case studies. Users can access these cases for practice, research, or reference, saving time and effort in creating new scenarios.
- 4. Chatbot Interviewer: The integrated chatbot serves as an interviewer, simulating real interview scenarios. Users can practice their interview skills, answer questions, and receive feedback on their responses.
- 5.Feedback and Recommendations: After each interview session or case study analysis, Case Cracker provides detailed feedback and recommended solutions. This feature aids users in identifying areas for improvement and enhancing their problem-solving abilities.
- 6.Customization: Users can customize the difficulty level, style, and complexity of the generated cases to match their specific learning or practice needs.
- 7.User-Friendly Interface: The platform offers an intuitive and user-friendly interface, making it accessible to individuals with varying levels of technical proficiency.
- 8.Case Cracker is a versatile AI-powered platform designed to cater to the needs of management students, job seekers, and educational institutions. Its diverse features encompass case study generation, graphical analytics, a case library, and an interactive interview experience, all aimed at improving analytical and interview skills.

## **OPT Details**

You will work with a TA/Volunteer to fill-in the letter.

Volunteers must make a positive contribution to Al 4 Good projects.

OPT is at least 20 hours a week.

The projects MUST be STEM

Volunteers can stop any time with notice. The hope is you leave this program to a real job. Please give a heads up if you leave.

Volunteers can be terminated at any time if they are not living up to their 20 hours per week obligation.

Volunteers must check in with the TA/Volunteer at least once every 2 weeks with progress.

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If you are asking for an offer letter send a legal name, the e-mail it is being sent to, your EAD start date, and any information that I would need to send the actual letter.

A TA or project leader will work with you drafting the letter.

#### Images and Large files

Github has closed our repository because it used too much space. Avoid putting large files on Github.

#### Join the opt channel on Slack

https://join.slack.com/t/neuaiskunkworks/shared\_invite/zt-9h3ckfg2-YR2h6xsTURhLKKRlQpxSzQ

### **Default Project suggestions**

Project: Improve and Rewrite Notebooks from the Al Skunks Skool repository

There are many incomplete notebooks that can be used as a started point in the Al Skunks Skool repository <a href="https://github.com/aiskunks/Skunks\_Skool/">https://github.com/aiskunks/Skunks\_Skool/</a>

Volunteers are expected to make a high quality tutorial teaching something in STEM roughly -10 minutes in length every week. Any topic in STEM is OK and there are some

suggested topics at the bottom of this document. There must be code associated with all tutorials. All code MUST follow a style guide like the **Google Python Style Guide** https://google.github.io/styleguide/pyguide.html

All text must be cleaned up and rewritten with an LLM tool like ChatGPT (e.g ChatGPT can you clean up the following text?)

Project: Custom GPT and Al Model Development for Humanitarians

Duration: Ongoing (with a minimum commitment of a couple of months)

Roles and Responsibilities:

#### **Custom GPT Model Development:**

- Volunteers can create custom GPT models based on a list of specific topics provided by the project coordinator.
- The custom models should be trained to generate content relevant to the chosen topics.

#### **Auditing Prompt Engineering Class:**

- Volunteers can audit the prompt engineering class conducted through Zoom.
- They will be added as observers to the course to enhance their understanding of prompt engineering.

## Further Training of Existing Language Models (LLMs):

- Volunteers are encouraged to further train existing Language Models (LLMs) available from Hugging Face.
- They can improve the models' capabilities and fine-tune them for specific tasks or domains.

#### Creation of Educational Videos for Humanitarians:

- Volunteers must create instructional videos that document how they created their custom GPT models or further trained existing models.
- These videos should provide a step-by-step guide for humanitarian organizations and individuals interested in utilizing AI models.

#### Access to Computing Resources:

- The development team will provide volunteers with access to computing resources for training and fine-tuning AI models.
- Volunteers can leverage these resources for their projects.

#### Data Scraping for Model Training:

- Volunteers should use their web development skills to gather relevant data from the internet for training their AI models.
- Data scraping techniques can be employed to collect necessary information.

## Usage of Humanitarians GPTplus Account:

- All custom GPT models and further-trained LLMs must be built and hosted under the "Humanitarians GPTplus" account.
- Volunteers will have access to this account for model deployment and management.

#### Requirements:

- Volunteers should have a background in web development and programming.
- Basic understanding of AI and machine learning concepts is preferred.
- Access to a stable internet connection for participating in Zoom classes and uploading videos.
- Commitment to actively contribute for at least a couple of months.

#### Benefits:

- Gain hands-on experience in AI model development.
- Contribute to humanitarian efforts by creating AI models for relevant tasks.
- Enhance web development and data scraping skills.
- Collaborate with a diverse team of volunteers and experts.

#### How to Get Started:

• Interested volunteers should contact the project coordinator for further instructions on accessing resources and joining the project.

This specification outlines the various tasks and responsibilities for volunteers interested in contributing to the project. It emphasizes the importance of creating custom AI models, sharing knowledge through videos, and using their skills for humanitarian purposes.

Some suggested projects.

# Proposal 0: Suggest a Project for Implementing AI for Personalized STEM Education

#### Purpose:

The aim of this project is to leverage AI technology, specifically ChatGPT, to enhance personalized STEM (Science, Technology, Engineering, and Mathematics) education. By doing so, we intend to create more effective and engaging learning experiences for students while improving the alignment between syllabi and learning outcomes.

#### Approach:

#### Project Guidelines and Requirements:

- Develop comprehensive guidelines specifying the project's objectives, scope, and the specific use of ChatGPT in STEM education.
- Outline the requirements and expectations for the successful implementation of AI in educational contexts.

#### Data and Resource Assessment:

- Assess the availability of relevant educational data, course materials, and examples that can be used to support the development of Al-powered educational tools.
- Identify potential sources of data that can be utilized for creating a knowledge-rich AI model.

#### **Exploring Prompt Engineering:**

- Investigate how prompt engineering techniques can be effectively employed to address the specific challenges in STEM education.
- Determine the most suitable prompts and approaches for generating educational content and insights.

#### Collaborative Team Formation:

- Assemble a multidisciplinary team comprising students, educators, and Al enthusiasts who are passionate about improving STEM education.
- Foster collaboration among team members to ensure diverse perspectives and expertise.

#### Benefits of the Project:

Enhanced Syllabus-Learning Outcome Alignment:

- Implementing Al-driven solutions improves the alignment between STEM course learning outcomes and syllabi.
- ChatGPT can identify discrepancies and offer recommendations to enhance alignment, optimizing the educational journey.
- Reduced Administrative Burden:
  - Faculty members will experience reduced administrative burdens in the creation and revision of syllabi.
  - Al tools can automate certain aspects of syllabus development, allowing educators to focus on teaching and content quality.
- Personalized Learning Approach:
  - Al-driven personalization tailors educational content and delivery methods to individual student needs, maximizing engagement and learning outcomes.
- Quality Enhancement:
  - By integrating AI into STEM education, we aim to elevate the overall quality of teaching and learning experiences, making them more effective and enjoyable.

#### Next Steps:

Interested volunteers are invited to join this innovative project aimed at revolutionizing STEM education through AI. We encourage individuals with expertise in AI, education, and data analysis to contribute their skills and ideas. Together, we can create a transformative learning environment that benefits both students and educators.

This proposal outlines a project that focuses on the application of AI in STEM education, with an emphasis on improving personalized learning experiences and syllabus-learning outcome alignment. Volunteers can adapt this proposal to propose their own projects related to STEM or Education, highlighting their unique objectives and approaches.

# **Proposal 1: Enhancing Syllabus-Learning Outcome Alignment**

## Purpose:

To engage students and faculty in developing uses of ChatGPT to support more efficient and engaging teaching and learning experiences by improving the alignment between syllabi and learning outcomes.

### Approach:

Develop guidelines for the project, specifying the requirements for using ChatGPT in this context.

Assess the availability of data and examples to support the project's development.

Determine if prompt engineering can effectively address the problem.

Select a team of students and faculty to collaborate on the project.

Benefits of Project:

Improves the alignment between course learning outcomes and syllabi.

ChatGPT identifies discrepancies and suggests additions to enhance alignment.

Reduces the administrative load on faculty in syllabus creation and revision.

Provides a personalized approach to course design based on learning outcomes.

Enhances the overall quality of teaching and learning experiences.

# **Proposal 2: Real-time Student Assessment and Support**

## Purpose:

To leverage ChatGPT for real-time student assessment and support during courses to enhance learning outcomes.

## Approach:

Create project guidelines and assess data and examples availability.

Determine the feasibility of using ChatGPT for real-time assessments.

Select students and faculty to work on the project, focusing on foundational courses or programs like Global Scholars or NUin.

Benefits of Project:

Develops pre and post-class quizzes using ChatGPT to measure student progress.

Provides real-time assessment of student learning during the course.

Identifies areas where students are struggling and recommends appropriate support.

Ensures originality of student submissions through ChatGPT analysis.

### **Proposal 3: Integration of ChatGPT with XR Projects**

## Purpose:

To explore the integration of ChatGPT and personalized tutoring into XR (Extended Reality) projects, enhancing the immersive learning experience.

## Approach:

Develop project guidelines, considering XR integration and ChatGPT requirements.

Evaluate data and examples available for XR projects.

Select students and faculty for the project, focusing on those integrating XR into their courses.

Benefits of Project:

Enhances XR projects with ChatGPT-powered personalized tutoring.

Provides students with real-time assistance and feedback within XR environments.

Improves the overall learning experience in XR-based courses.

### **Proposal 4: Al-Powered Grading Assistance**

### Purpose:

To leverage ChatGPT to streamline and enhance the grading process for faculty, providing timely and constructive feedback to students.

## Approach:

Develop project guidelines for using ChatGPT in grading.

Assess the availability of relevant data and examples for AI grading.

Determine if prompt engineering can effectively address grading challenges.

Assemble a team of students and faculty to collaborate on the project.

Benefits of Project:

Automates the grading of assignments and assessments using ChatGPT.

Provides consistent and objective feedback to students.

Reduces the administrative load on faculty, allowing more time for teaching.

Enhances the quality and speed of feedback to students, promoting learning.

## **Proposal 5: Personalized Study Guides**

# Purpose:

To develop ChatGPT-powered personalized study guides that help students navigate complex course materials and focus on areas of weakness.

## Approach:

Create project guidelines for the development of personalized study guides.

Evaluate the availability of data and examples for this educational application.

Assess the feasibility of using ChatGPT to generate personalized study resources.

Form a team of students and faculty to work on the project.

Benefits of Project:

Offers students customized study materials tailored to their individual learning needs.

Supports students in efficiently preparing for exams and assignments.

Encourages active learning and self-assessment.

Improves overall academic performance and retention.

## **Proposal 6: Automated Course Feedback and Improvement**

## Purpose:

To use ChatGPT for gathering and analyzing course feedback from students, providing actionable insights to faculty for continuous improvement.

# Approach:

Develop project guidelines for the use of ChatGPT in course feedback analysis.

Evaluate the availability of relevant data and examples for feedback analysis.

Determine if prompt engineering can effectively collect meaningful feedback.

Select a team of students and faculty for the project.

Benefits of Project:

Streamlines the process of collecting and analyzing course feedback.

Provides faculty with actionable insights to enhance their teaching methods.

Enhances the overall quality of courses and the student learning experience.

Promotes a culture of continuous improvement in teaching.

Timeline:

## **Proposal 7: Al-Enhanced Career Guidance**

### Purpose:

To utilize ChatGPT to provide personalized career guidance and counseling to university students, helping them make informed decisions about their future career paths.

### Approach:

Develop project guidelines for the integration of ChatGPT into career counseling.

Assess the availability of data and examples to support career guidance.

Determine if prompt engineering can effectively address career-related inquiries.

Form a team of students, career counselors, and faculty to work on the project.

# **Proposal 8: Al-Enhanced Academic Advising**

## Purpose:

To leverage ChatGPT for academic advising, providing students with quick and accurate information about course selection, degree requirements, and academic planning.

### Approach:

Develop project guidelines for the integration of ChatGPT into academic advising.

Assess the availability of data and examples for academic advising scenarios.

Determine if prompt engineering can effectively address academic inquiries.

Assemble a team of students, academic advisors, and faculty to collaborate on the project.

Benefits of Project:

Streamlines the academic advising process, reducing wait times for students. Provides students with immediate answers to common academic questions. Ensures consistency and accuracy in academic advising information. Frees up academic advisors to focus on more complex advising needs.

# **Proposal 9: Al-Powered Research Support**

## Purpose:

To harness ChatGPT for research assistance, helping faculty and students find relevant literature, formulate research questions, and refine research methodologies.

# Approach:

Develop project guidelines for using ChatGPT in research support.

Evaluate the availability of data and examples for research-related inquiries.

Determine if prompt engineering can effectively assist with research tasks.

Select a team of students, researchers, and faculty to work on the project. Benefits of Project:

Enhances the efficiency of literature reviews by automating the search process.

Assists in the formulation of research questions and hypotheses.

Provides guidance on research methodologies and data analysis techniques.

Supports faculty and students in producing high-quality research.

## **Proposal 10: Multilingual Tutoring and Language Support**

## Purpose:

To utilize ChatGPT for multilingual tutoring and language support, helping international students improve their English proficiency and academic performance.

# Approach:

Develop project guidelines for the integration of ChatGPT into language support.

Assess the availability of multilingual data and examples.

Determine if prompt engineering can effectively address language learning needs.

Form a team of students, language instructors, and faculty to collaborate on the project.

Benefits of Project:

Offers personalized language tutoring and support to international students. Helps students overcome language barriers and succeed academically. Supports language instructors in providing tailored language assistance.

Enhances the university's inclusivity and support for international students.

## **Proposal 11: Al-Powered Course Enrollment Recommendations**

Purpose:

To implement ChatGPT for course enrollment recommendations, helping students make informed decisions about their course selections based on their academic goals and interests.

## Approach:

Develop project guidelines for integrating ChatGPT into course enrollment.

Evaluate the availability of academic data and examples for enrollment advice.

Determine if prompt engineering can effectively address course selection inquiries.

Form a team of students, academic advisors, and faculty to work on the project.

Benefits of Project:

Offers personalized course recommendations based on academic history and career goals.

Helps students create more balanced and relevant course schedules.

Increases course enrollment efficiency and reduces scheduling conflicts.

Enhances student satisfaction and academic success.

# Proposal 12: Al-Powered Language Translation and Accessibility

Purpose:

To leverage ChatGPT for language translation and accessibility services, ensuring that course materials and resources are accessible to all students, including those with language barriers.

### Approach:

Develop project guidelines for using ChatGPT for language translation and accessibility.

Assess the availability of multilingual data and examples.

Determine if prompt engineering can effectively address translation and accessibility needs.

Assemble a team of students, accessibility experts, and faculty to collaborate on the project.

Benefits of Project:

Provides real-time translation of course materials and lectures for non-native English speakers.

Enhances accessibility for students with language barriers or disabilities.

Supports the university's commitment to inclusivity and diversity.

Improves the overall learning experience for all students.

## **Proposal 13: Al-Powered Plagiarism Detection**

# Purpose:

To develop ChatGPT-powered plagiarism detection tools that assist faculty in identifying and addressing instances of academic dishonesty.

# Approach:

Create project guidelines for using ChatGPT in plagiarism detection.

Evaluate the availability of data and examples for plagiarism analysis.

Determine if prompt engineering can effectively detect plagiarism.

Select a team of students, faculty, and IT experts to work on the project.

Benefits of Project:

Streamlines the process of plagiarism detection for faculty.

Provides accurate and efficient identification of plagiarized content.

Supports academic integrity and upholds the university's standards.

Facilitates a fair and honest learning environment.

## **Proposal 14: Al-Enhanced Student Feedback Analysis**

### Purpose:

To utilize ChatGPT for analyzing and summarizing student feedback from course evaluations, providing faculty with actionable insights for continuous improvement.

## Approach:

Develop project guidelines for using ChatGPT in feedback analysis.

Assess the availability of data and examples for feedback analysis.

Determine if prompt engineering can effectively summarize student feedback.

Form a team of students, faculty, and data analysts to work on the project.

Benefits of Project:

Accelerates the process of analyzing and summarizing course evaluations. Provides faculty with actionable insights to enhance teaching methods. Supports evidence-based improvements in course delivery. Promotes a culture of continuous improvement in education.

Feedback analysis to further enhance the university learning experience.

### **Proposal 15: Al-Enhanced Academic Resource Recommendation**

## Purpose:

To utilize ChatGPT for recommending academic resources such as textbooks, research articles, and supplementary materials to students, enhancing their access to relevant and quality learning materials.

### Approach:

Develop project guidelines for integrating ChatGPT into academic resource recommendations.

Evaluate the availability of academic data and examples for resource suggestions.

Determine if prompt engineering can effectively address resource recommendation inquiries.

Form a team of students, librarians, and faculty to collaborate on the project. Benefits of Project:

Offers personalized academic resource recommendations based on course materials and interests.

Helps students access relevant research articles, textbooks, and supplementary materials.

Enhances the quality of student research and academic work.

Facilitates a more efficient learning experience.

# **Proposal 16: Al-Enhanced Extracurricular Activity Matching**

Purpose:

To implement ChatGPT for matching students with extracurricular activities, clubs, and organizations that align with their interests and passions, fostering a sense of belonging and personal growth.

### Approach:

Develop project guidelines for using ChatGPT in extracurricular activity matching.

Assess the availability of data and examples for activity recommendations.

Determine if prompt engineering can effectively match students with activities.

Assemble a team of students, student affairs professionals, and faculty to collaborate on the project.

Benefits of Project:

Provides personalized recommendations for student involvement in extracurricular activities.

Increases student engagement and satisfaction with campus life.

Supports personal and leadership development among students.

Strengthens the campus community and student retention.

# **Proposal 17: Al-Powered Student Mental Health Support**

## Purpose:

To leverage ChatGPT to offer students immediate mental health support and resources, ensuring their well-being and academic success.

# Approach:

Create project guidelines for using ChatGPT in mental health support. Evaluate the availability of mental health data and resources. Determine if prompt engineering can effectively address mental health inquiries.

Select a team of students, mental health professionals, and faculty to work on the project.

Benefits of Project:

Provides students with immediate access to mental health resources and support.

Offers guidance, coping strategies, and referrals to counseling services.

Enhances student well-being and reduces academic stress.

Promotes a healthy and supportive campus community.

## **Proposal 18: Al-Enhanced Student Peer Tutoring**

### Purpose:

To implement ChatGPT for student peer tutoring and academic assistance, allowing students to help their peers with coursework and assignments.

## Approach:

Develop project guidelines for ChatGPT-powered peer tutoring.

Assess the availability of academic data and examples for peer tutoring.

Determine if prompt engineering can effectively facilitate peer tutoring interactions.

Form a team of students, academic support staff, and faculty to collaborate on the project.

Benefits of Project:

Facilitates peer-to-peer academic assistance through ChatGPT.

Promotes student collaboration and academic support within the community.

Encourages active learning and knowledge sharing among students.

Enhances academic performance and student engagement.

## **Proposal 19: Al-Enhanced Course Registration Optimization**

Purpose:

To utilize ChatGPT to help students optimize their course registration process by providing real-time recommendations based on academic goals, prerequisites, and schedule preferences.

Approach:

Develop project guidelines for ChatGPT-powered course registration assistance.

Assess the availability of academic data and examples for course recommendations.

Determine if prompt engineering can effectively assist with course selection. Form a team of students, registrars, and faculty to collaborate on the project. Benefits of Project:

Offers personalized course registration guidance, reducing scheduling conflicts.

Helps students select courses that align with their academic and career objectives.

Enhances the efficiency of the course registration process.

Improves student satisfaction and academic planning.

Proposal 20: Al-Enhanced Faculty Development Support

Purpose:

To leverage ChatGPT for providing faculty members with personalized support, resources, and best practices to enhance their teaching and research capabilities.

## Approach:

Create project guidelines for using ChatGPT in faculty development support.

Assess the availability of faculty development data and resources.

Determine if prompt engineering can effectively address faculty inquiries.

Select a team of students, instructional designers, and faculty to work on the project.

Benefits of Project:

Offers faculty members on-demand access to teaching and research support.

Provides customized recommendations for pedagogical techniques and research methodologies.

Enhances faculty members' professional growth and instructional effectiveness.

Strengthens the quality of teaching and research across the university.

# **Proposal 21: Al-Enhanced Peer Mentorship Program**

# Purpose:

To implement ChatGPT for facilitating peer mentorship programs by connecting experienced students with newcomers and providing guidance on academic and campus life.

# Approach:

Develop project guidelines for ChatGPT-powered peer mentorship. Assess the availability of data and resources for peer mentorship.

Determine if prompt engineering can effectively support mentorship interactions.

Form a team of students, mentorship coordinators, and faculty to collaborate on the project.

Benefits of Project:

Facilitates peer-to-peer mentorship through ChatGPT.

Enhances the sense of community and support for new students.

Provides guidance on academic and social integration.

Promotes student success and retention.

Proposal 22: Al-Powered Alumni Engagement

### Purpose:

To leverage ChatGPT for enhancing alumni engagement by providing personalized updates, event notifications, and career support to alumni, fostering a lifelong connection with the university.

## Approach:

Create project guidelines for ChatGPT-powered alumni engagement.

Assess the availability of alumni data and resources for engagement.

Determine if prompt engineering can effectively facilitate alumni interactions.

Select a team of students, alumni affairs professionals, and faculty to work on the project.

Benefits of Project:

Offers personalized updates and event invitations to alumni.

Provides career resources, networking opportunities, and mentorship to graduates.

Strengthens alumni connections with the university.

Increases alumni involvement and support for current students.

## **Proposal 23: Al-Powered Campus Navigation and Assistance**

Purpose:

To implement ChatGPT for campus navigation and assistance, helping students and visitors find their way around the campus, locate buildings, and access important information.

Approach:

Develop project guidelines for ChatGPT-powered campus navigation.

Assess the availability of campus data and resources for navigation.

Determine if prompt engineering can effectively guide users around the campus.

Form a team of students, campus administrators, and faculty to work on the project.

Benefits of Project:

Enhances the overall campus experience by providing instant navigation support.

Helps newcomers and visitors quickly find campus buildings, facilities, and resources.

Provides real-time information on campus events, parking, and services. Improves accessibility and reduces the stress of navigating a large campus.

Proposal 24: Al-Enhanced Study Group Formation

Purpose:

To leverage ChatGPT to assist students in forming effective study groups based on their course schedules, academic interests, and study preferences.

## Approach:

Create project guidelines for ChatGPT-powered study group formation.

Assess the availability of academic data and resources for study group recommendations.

Determine if prompt engineering can effectively match students for study groups.

Select a team of students, academic advisors, and faculty to collaborate on the project.

Benefits of Project:

Facilitates the creation of study groups optimized for academic success.

Helps students connect with peers who share similar schedules and study goals.

Enhances collaboration, peer learning, and academic performance.

Promotes a culture of teamwork and support among students.

## **Proposal 25: Al-Enhanced Student Outreach and Engagement**

## Purpose:

To utilize ChatGPT for proactive student outreach and engagement, sending personalized notifications, reminders, and event invitations to keep students informed and involved in campus life.

# Approach:

Develop project guidelines for ChatGPT-powered student outreach. Assess the availability of student data and resources for outreach.

Determine if prompt engineering can effectively engage students.

Form a team of students, communication specialists, and faculty to work on the project.

Benefits of Project:

Increases student engagement in campus activities and events.

Provides timely information on important dates, deadlines, and campus news.

Enhances the sense of belonging and connection to the university community.

Supports student success and retention efforts.

Proposal 26: Al-Powered Learning Analytics and Intervention

## Purpose:

To leverage ChatGPT for real-time learning analytics, identifying students at risk of academic challenges and providing early interventions to support their success.

## Approach:

Create project guidelines for ChatGPT-powered learning analytics.

Assess the availability of academic data and resources for analytics.

Determine if prompt engineering can effectively identify students at risk.

Select a team of students, data analysts, and faculty to collaborate on the project.

Benefits of Project:

Identifies at-risk students based on academic performance and engagement data.

Provides timely interventions such as study tips, resource recommendations, and counseling referrals.

Enhances student retention rates and academic outcomes.

Supports a data-driven approach to student success.