



## SHP Student Interns for Research and Scholarly Activities Application of Project Proposal Form

### Instructions:

Please fill out the form and return via email to Nipa Sahasrabuddhe ([ns1115@shp.rutgers.edu](mailto:ns1115@shp.rutgers.edu)) by **March 31, 2023**. Please fill each box to the right of each required field. If you are sending attachments, please ensure your contact information is added to all your forms.

### Faculty Contact Information:

Date submitted:	3-30-23
Faculty Name:	Rahul Mittal, Shankar Srinivasan, Jim Brown and James Lee
Department/Program:	Health Informatics
Telephone number:	732-235-6484
E-mail:	Rm1703@shp.rutgers.edu

### Project Detail:

Project Title: (56 characters max)	ChatGPT in Health Education and Practice
Hypothesis:	Natural Language Processing tools like ChatGPT and the related DocsGPT are effective in the development and implementation of health educational materials and systems
Description: (Include design, methodology, data collection, techniques, data analysis to be employed, evaluation and interpretation methodology for research component)	<p>ChatGPT is a Natural Language Processing (NLP) based Artificial Intelligence (AI) tool which has gained a lot of attention and research of late due to its potential capabilities and uses in various sectors including academia and clinical practice. With the current version of ChatGPT (GPT-4) its capability has increased to be able to process up to 25,000 words as inputs at a time and with a possibility to process images too very soon.</p> <p>DocsGPT is a variation on ChatGPT (with a library of clinical text prompts) which works more like a Chatbot and with promising uses in</p>

	<p>clinical practice and education.</p> <p>The project involves the following:</p> <ol style="list-style-type: none"> <li>1. Conduct a comprehensive literature review of the current uses of ChatGPT and DocsGPT in various sectors but focusing more on health education and practice.</li> <li>2. Develop course materials using ChatGPT for one or two example courses as determined by the faculty investigators.</li> <li>3. Develop a Clinical Decision Support System using DocsGPT for a pre-determined clinical diagnoses or procedure use.</li> <li>4. Perform comparative analyses of the above with those generated by non ChatGPT means.</li> <li>5. Present and/or publish the findings at a conference and/or a peer-reviewed journal.</li> </ol>
Specific Student Responsibilities:	<p>Specific student responsibilities include:</p> <ol style="list-style-type: none"> <li>1. Performing comprehensive literature review of both peer-reviewed and published as also white papers and such in the use of ChatGPT in various sectors including healthcare</li> <li>2. Install and familiarize oneself with the use of ChatGPT and DocsGPT</li> <li>3. Help faculty investigators to identify and choose appropriate course(s) and clinical diagnosis/procedure for the use of the project</li> <li>4. Prepare a project report detailing all of the above as also prepare a Poster for Research Day and a manuscript as per an identified journal's requirements.</li> </ol> <p>This project requires the student intern to be proficient in Health IT and preferably with AI and/or analytics</p>
Start / end date of project:	June 6, 2023 – August 15, 2023

### **Educational:**

WHAT OTHER EDUCATIONAL OPPORTUNITIES ARE AVAILABLE TO STUDENTS? (e.g., journal club, seminars, clinic, rounds)	<p>Required ChatGPT Software will be made available to the student for developing the above.</p> <p>Research material and other necessary reference/papers will also be made available to the student</p>
WHERE DO YOU PLAN TO	SHP Research Day Poster presentation and manuscript submissions to peer-reviewed journals

PRESENT OR PUBLISH  
THE FINDINGS WITH THE  
STUDENT?

(e.g., national or state  
meetings, newsletter or  
journal, SHP poster day)

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**CHECK ALL APPROPRIATE BOXES BELOW AND PROVIDE REQUESTED  
INFORMATION.**

This project is: ☐ clinical ☐ laboratory ☐ behavioral ☐ survey ☒ educational

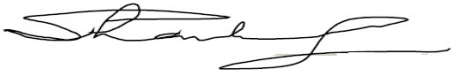
☐ Other: please specify \_\_\_\_\_

☐ This project involves the use of human subjects (including chart review,  
retrospective studies and questionnaires).

Pending ☐ Approved ☐ IRB Protocol Number \_\_\_\_\_

***IRB approval must be obtained by June 2023***

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3/31/23

\_\_\_\_\_  
Signature of Department Chair

\_\_\_\_\_  
Date

OR-For internal use

Form: (1)

Reviewed date: 4/4/23

Date processed on website: \_\_\_\_\_