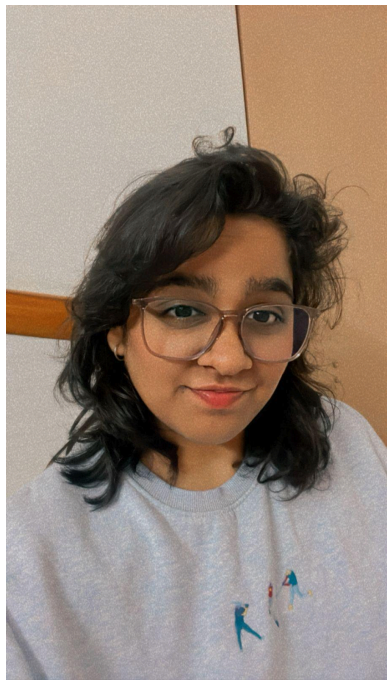


**Preliminary Application for the Japanese Government (MEXT) Scholarship  
Research Students 2027**

**Read the instructions carefully before proceeding to fill out the form:**

1. Please submit your application by email to scholarship-india@nd.mofa.go.jp in MS Word format only. Kindly ensure that the file size does not exceed 1 MB. Please note that applications submitted in any other format or through any other medium may not be considered.
2. Please ensure that a photograph is attached to the designated area before submission.
3. Applications will be evaluated based on the submitted information and Research Plan. Incomplete applications, including those missing the Field of Study or Research Plan, will not be evaluated. This applies to Master's course applications as well.
4. If your Research Plan exceeds two pages, you may include an additional one or two pages to ensure that your proposal is explained clearly and comprehensively.
5. The guidelines available on the Embassy's website are provided solely for reference and general information up to the preliminary application evaluation stage. The documents specified in the guidelines are required only from candidates who are shortlisted and invited to appear for the written test and interview. Applicants are therefore requested not to attach or submit any additional documents at the preliminary application stage.
6. Applicants are encouraged to complete the application form thoughtfully and to the best of their understanding. To help us manage inquiries efficiently, we kindly request that the Embassy be contacted only for important or necessary matters.
7. In principle, the university preference mentioned in the application must remain unchanged, and no changes will be permitted at a later stage. Applicants are therefore advised to carefully research Japanese universities and professors before filling in this information. Please note that applicants are not required to contact Japanese university professors at this stage.

Field of Study	Computer science/Information Technology	
Course Applied	<b>Master's</b>	
Name	SEJAL MITTAL	
Date of Birth (DD/MM/YYYY)	07/07/2004	
Age (on April 1, 2027)	22	
Current Address (Do not omit city name.)	Chintels Serenity, Tower-5, 1602 , Sector-109, Gurugram, Haryana	
Contact No. (Write only one; if there is more than one, mention it as an alternative no.)	+91 9821148703	
Email ID (write only one)	sejalmittal7@gmail.com	

**Educational Qualification:**

	Name of Institution (School/College/University/Institute) and Place/City	Year of Passing	Score (Percentage only*)
10 <sup>th</sup> Grade	Arwachin International School, Dilshad Garden, New Delhi	2020	83%
12 <sup>th</sup> Grade	Arwachin International School, Dilshad Garden, New Delhi	2022	82%
Bachelor's Degree in Computer Application with specialisation in AI and DS	K.R Mangalam University, Gurugram, Haryana	2025	67%
Master's Degree (Please Specify)	None	None	None

M.Phil./Ph.D.	None	None	None
Any other national exam like NET/GATE/GPAT, etc. (A relevant certificate must be pasted at the end of this form and keep in mind the size of the whole document)	None		

\* Those who have a CGPA score must convert the grade into a percentage according to the respective university's formula/guidelines.

\* If you are currently pursuing a course, please indicate the score obtained up to the most recent completed semester or year.

**Employment Record (please begin with your current job and add rows if required)**

Name and location of the organization	Period of Employment	Position	Job profile

\* Applicants are requested to list only full-time employment. Research Assistant positions and internships will not be counted as employment experience

Please mention if you have qualified for any of the following, along with the respective score and year of qualifying:

- 1) TOEFL/IELTS: None
- 2) GRE: None

List of Award/Certificate/Medal, if any (give specific details)

- A) State-level award: I have represented my state in multiple karate tournaments and other sports competitions, where I consistently performed well and secured medals. My participation at this level helped me build a strong competitive foundation and discipline from an early stage.
- B) National level award: I have competed at the national level in both karate and tug of war, earning medals across events. These experiences strengthened my ability to perform under pressure and collaborate effectively within a team environment.
- C) International level award: I have represented India in international traditional karate tournaments and have won medals at this level. I was recognized as India's first international Black Belt in traditional karate and currently hold a Black Belt (Ni-dan). Over the course of my training and competitions, I have earned approximately 30–35 medals, including gold, silver, and bronze, primarily in karate.

**Publication Details (in the given format):**

[1] Research article/Review/book chapter, etc.:  
Title:

Journal Name:

Authors (in the same order they appear in publication)

Year/Vol/Page

DOI no. (or direct link to webpage) (mandatory):

Impact factor, if any (only Clarivate Analytics impact factor):

Publisher:

Master's Thesis details:

Title:

Area of research:

Supervisor's name:

Abstract:

Name of publication out of master's thesis, if any:

専攻分野及び研究計画

Field of Study and Research Plan

Name (in alphabet)

(氏名(アルファベット)) MITTAL, SEJAL -  
(Surname) (Given name) (Middle name)

Nationality

(国籍) INDIAN

《Guide for Creating a Field of Study and Research Plan Sheet/作成要領》

(1) As this sheet is one of the most important references for selection and university placement, outline your field of study and specify your research theme and plan in line with the following items 1 and 2. If plagiarism or fraud is discovered after selection, the selection will be cancelled retroactively.

本様式は選考及び大学配置の重要な参考となるので、下記の項目1及び2に沿って専攻分野の概要及び研究計画の詳細を具体的に記入すること。なお、採用後に不正、盗用等が判明した場合は遡って採用を取り消す。

(2) This sheet must be typewritten or written in block letters. If possible, please write in Japanese.

記入はタイプ又は楷書によるものとする。相当の日本語能力を有する者は日本語により記入すること。

(3) This sheet must be created within two pages. Additional materials may be attached if necessary. Both single-sided and dual-sided printing will be acceptable.

本様式は2ページ以内で作成すること。ただし必要な場合は別紙を付してもよい。印刷は片面印刷、両面印刷のどちらも可。

1. Past and present field of study (これまでの専攻分野)

2. Research theme and plan in Japan (渡日後の研究テーマ及び研究計画)

Describe articulately the research theme and plan you wish to carry out in Japan. Specify particularly the ultimate goal(s) of your research in Japan. (日本において希望する研究テーマ及び研究計画を明確に記入すること。特に研究の最終目標を具体的に記入すること。)

(1) Research theme (研究テーマ)

Development of AI-Based Conversational Systems for Culturally Adaptive and Emotionally Intelligent User Interaction.

ひとのきもちがわかる AI チャットシステムのかいはいつ (Development of AI chat systems that understand people's feelings)

(2) Research plan (研究計画)

My research interest lies in the development of human-centred conversational AI systems that can understand not only linguistic input but also emotional and cultural context. As artificial intelligence becomes increasingly integrated into everyday life, existing dialogue systems still face limitations in adapting to diverse user backgrounds and providing emotionally meaningful interactions.

During my undergraduate studies in computer applications, I developed an AI-based system titled "Vedic Gyan ChatBot." This project involved building a real-time conversational interface using OpenAI's GPT-3.5 Turbo API, integrated with structured textual datasets derived from the Bhagavad Gita. I worked on preprocessing textual data, mapping user queries to relevant contextual responses, and designing a user-friendly interface using modern web technologies. This experience provided practical exposure to natural language processing workflows, API-based AI systems, and user interaction design. However, the system relied on pre-trained models and lacked deeper contextual adaptation, emotional understanding, and cultural sensitivity, highlighting important research gaps.

Building on this foundation, my proposed research aims to design and develop advanced conversational AI systems capable of adapting to both emotional states and cultural contexts, particularly in multilingual environments. The research will focus on improving contextual understanding in dialogue systems through transformer-based architectures such as BERT and GPT models, combined with sentiment and emotion recognition techniques.

The methodology will include the collection and preprocessing of multilingual datasets, including culturally conversational data. I plan to implement and fine-tune NLP models to enhance dialogue coherence, emotional accuracy, and contextual relevance. The system will be evaluated using both quantitative metrics, such as response relevance and classification accuracy, and qualitative measures such as user satisfaction and perceived empathy.

Furthermore, this research will explore practical applications in areas such as mental well-being support, educational assistance, and intelligent digital companions. By integrating emotional intelligence into conversational AI, the system can provide more supportive and meaningful user interactions.

Japan offers a unique and advanced research environment in the fields of artificial intelligence, robotics, and human-computer interaction. Its focus on human-centred technology and culturally nuanced communication makes it an ideal setting for this research. Through this program, I aim to develop technically robust and socially impactful AI systems that bridge the gap between technological efficiency and human emotional understanding.

**Placement Preference Application Form (Preliminary Application Form)**

Preference	Name of University	Name of Graduate School	Name of Professor
First choice	Tokyo University of Science	Graduate School of Science and Technology	To be decided based on research alignment
Second choice	Osaka Metropolitan University	Graduate School of Informatics	To be decided based on research alignment
Third choice	Kyoto Institute of Technology	Graduate School of Science and Technology	To be decided based on research alignment