**COVERING LETTER FOR YOUR MAIL TO ICANN**

*Dear Sir/Madam,*

*Please find attached my Profile as well as Expression of Interest to work as a volunteer for Generation Panels to Develop Root Zone Label Generation Rules with specific reference to Neo-Brahmi scripts.*

*With kind regards,*

ATTACHMENTS:

1. LETTER OF EXPRESSION OF INTEREST:

**Expression of Interest**

**Name:** Gurpreet Singh Lehal

**Email**: gslehal@gmail.com

**Position:** Professor, Department of Computer Science

**Expression of Interest**:

I have been associated with ***Punjabi University Patiala as Professor in Department of Computer Science.***

Among my other briefs, I have been working on projects related to initiatives in Indian languages, with special reference to ***Gurmukhi and Urdu***.

The nature of my work enables me to closely work with ***[Gurmukhi]*** and with language experts and linguistic communities. My technical background acts as a bridge for porting Indian languages onto the digital medium.

Internationalized Domain Names and Internationalized Registration Data are the areas where understanding of technical aspects related to basic DNS infrastructure and end users expectations from the same make solution finding more of a balancing act between technology and linguistics than merely a computational problem.

In my capacity as ***Professor and Director Advanced Centre for Technical Development of Punjabi language***, I have been closely associated with Indian scripts.

As mentioned in the call for volunteers, I would like to volunteer for the integration panel for neo-Brahmi Scripts: Bengali, Devanagari, Gujarati, Gurmukhi, Tamil and Telugu.

SIGNATURE/NAME

(Gurpreet Singh Lehal)

**PROFILE**

**Professor,**

Computer Science Department,

Punjabi University, Patiala.

**Director,**

Advanced Centre for Technical Development of Punjabi Language Literature and Culture,

Punjabi University, Patiala.

**Dean,**

Faculty of Physical Sciences,

Punjabi University, Patiala.

**Language Software and Technologies developed**:

* **Optical Character Recognition (OCR) Systems**
  + Urdu Optical Character Recognition (OCR) System
  + Web based Gurmukhi OCR

*(Launched by Shri Sachin Pilot, Hon'ble Minister of State for Communications and Information Technology in 2011)*

* First Bilingual Gurmukhi/Roman OCR
  + First Gurmukhi OCR

*(CD Released by Mr. Thiru Dayanidhi Maran, Hon'ble Union Minister of Communications and Information Technology in 2007)*

* **Transliteration Software**
  + Sindhi to Devnagri & Devnagri to Sindhi Transliteration Software
  + Devnagri to Urdu & Urdu to Devnagri Transliteration Software
  + Urdu/Kashmiri to Roman Script Transliteration Software
  + Shahmukhi (Urdu) to Gurmukhi Transliteration online software
  + **Sangam**, Gurmukhi-Shahmukhi (Urdu) transliteration Software

*(Released by Mr. Arjun Singh, Hon'ble Union Minister of Human Resource Development in 2004)*

* **Punjabi Language Software**
* Akhar, First Punjabi word processor
* PunjabiKhoj, Customized Search Engine for Punjabi (Project Leader) *(Released by Sardar Parkash Singh Badal, Hon'ble Chief Minister of Punjab in 2008)*
* Punjabi Morphological Analyser & Generator (Project Leader)

*(Released by Mr. Thiru Dayanidhi Maran, Hon'ble Union Minister of Communications and Information Technology in 2007)*

* First Intelligent Predictive Romanized typing utility for Gurmukhi text
* First Punjabi font to Unicode & Reverse conversion utility
* First Intelligent Punjabi/Hindi Font Recognition System
* First Punjabi Spell Checker
* First Punjabi Grammar Checker (Project Leader)
* First Punjabi Text to Speech Synthesis System (Project Leader)
* Online Punjabi teaching website (Project Leader)

*(Launched by Maharani Preneet Kaur, Hon'ble Member of Parliament in 2005)*

**Software Copyrighted**:

* Punjabi Word Processor
* Punjabi Spell Checker
* Gurmukhi OCR
* Hindi to Punjabi Machine Translation

(co-authored with Dr. Vishal Goyal)

**Research Funding, Consultancies and Grants**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Year** | **Funding Agency** | **Project** | **My role** | **Budget** |
| 2014-2015 | The Information Society Innovation Fund (ISIF) Grants, Australia | Enhancing Communication and Co-operation across South Asia: An ICT Solution to Script Barriers | Coordinator | AU$ 29,819 |
| 2010-2015 | Ministry of Communication and Information Technology, India | Development of Optical Character Recognition System for Urdu Script | Chief Coordinator | Rs. 52.50 Lakh |
| 2010-2015 | Ministry of Communication and Information Technology, India | Development of Robust Document Analysis and Recognition System for Printed Bilingual Gurmukhi/Roman Script | Chief Coordinator | Rs. 52.50 Lakh |
| 2011-2013 | Department of Science and Technology, India | Punjabi Text to Speech Help for people with cognitive disabilities | Chief Coordinator | Rs. 18.62 Lakh |
| 2009-2010 | The Information Society Innovation Fund (ISIF) Grants, Australia | Web based Transliteration and Translation System between Urdu and Hindi Languages | Chief Coordinator | US$ 29,896 |
| 2009-2014 | University Grants Commission, India | Special Assistance Programme -DRS-II (Thrust Area : Digital Image Processing) | Co-Coordinator | Rs. 51.0 Lakh |
| 2008-2009 | Defence R&D Organization, India | Transliteration system from Urdu to Devnagri | Principal Investigator | Rs. 9.9 Lakh |
| 2008-2010 | Ministry of Communication and Information Technology, India | Development of a grammar checking system for Punjabi | Principal Investigator | Rs. 25.48 Lakh |
| 2007 | Defence R&D Organization, India | Transliteration system from Urdu/Kashmiri to Roman script and reverse | Principal Investigator | Rs. 1.25 Lakh |
| 2006-2009 | Ministry of Communication and Information Technology, India | Development of Robust Document Analysis and Recognition System for Printed Gurmukhi Script | Chief Coordinator | Rs. 36.0 Lakh |
| 2006-2008 | Pan Asia Grants, Singapore | Shahmukhi to Gurmukhi Transliteration Solution for Networking | Chief Coordinator | US$ 30,000 |
| 2005 | MP Local Area Development Fund, Maharani Perneet Kaur, MP Patiala | Multi-media based Website for Online Teaching of Punjabi  ([*www.learnpunjabi.org*](http://www.learnpunjabi.org/)) & Establishment of Natural Language Processing Lab | Project Leader | Rs. 20.0 Lakh |
| 2004-2009 | University Grants Commission, India | Special Assistance Programme(Thrust Research Areas : Punjabi Speech Synthesis and Gurmukhi OCR) | Coordinator | Rs. 45.0 Lakh |
| 2000-2003 | Ministry of Communication and Information Technology, India | Resource Centre for Indian Language Technology Solutions- Punjabi | Chief Coordinator | Rs. 81.0 Lakh |

### International Research Collaborations

* Chief Coordinator of Indo-UK joint project “Enhancing Communication and Co-operation across South Asia: An ICT Solution to Script Barriers” with University of Manchester, UK during 2014-2015. **Project sponsored under ISIF grants, Australia.**
* Indo-US collaborative project, “Transliteration of Punjabi words in the *English-Punjabi Dictionary* from the AP2171 Romanization into the modified Perso-Arabic script”, with University of Maryland, Maryland, USA (2012-2013).
* Chief Coordinator of Indo-UK joint project “Web based Transliteration and Translation System between Urdu and Hindi Languages” with University of Manchester, UK during 2009-2010. **Project sponsored under ISIF grants, Australia.**
* Indo-US collaborative workshop, “Workshop on Punjabi teaching materials for internet use”, with University of California, Santa Barbara, USA in 2007 and 2008.
* Chief Coordinator of Indo-UK joint project “Shahmukhi to Gurmukhi Transliteration Solution for Networking” with University of Manchester, UK during 2006-2008. **Project sponsored under Pan-Asia grants, Singapore.**

### National Research Collaborations

* Working in Consortium mode with 15 premier institutes in India, with IIT Delhi as Consortium Leader. Other participating institutes include IIT Bombay, IIT Kharagpur, IIT Gauhati, IIIT Hyderabad, ISI Calcutta, CDAC and IISC Bangalore for *Development of Robust Document Analysis and Recognition System for Bilingual Printed Gurmukhi Script and Urdu Script* during 2010-2013.
* Chief coordinator of project “Punjabi Text to Speech Help for people with cognitive disabilities” in collaboration with IIT Delhi and GNEC Ludhiana during 2011-2013.
* Worked in Consortium mode with 11 national Institutions, with IIT Delhi as Consortium Leader, for *Development of Indic Script Optical Character Recognition Systems* during 2006-2009.

**Publications**:

* **Journals**: 41
* **International Conference Proceedings**: 59
* **International Book/ Book Chapter**: 2

**Citation Indices (Source : Google Scholar )**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| |  |  | | --- | --- | | [**Citations**](http://scholar.google.co.in/citations?user=c30bhDIAAAAJ&hl=en##) | **945** | | [**h-index**](http://scholar.google.co.in/citations?user=c30bhDIAAAAJ&hl=en##) | **15** | | [**i10-index**](http://scholar.google.co.in/citations?user=c30bhDIAAAAJ&hl=en##) | **29** | |