

IoE-Directorate प्रतिष्ठित संस्थान-निदेशालय University of Hyderabad हैदराबाद विश्वविद्यालय Gachibowli, Hyderabad – 500046 गचीबोवली, हैदराबाद - %0008६



## INSTITUTION OF EMINENCE (IoE) CALL FOR APPLICATIONS FOR POST-DOCTORAL FELLOWSHIP (IOE - PDF)

The *IoE- Post-doctoral fellowship (IoE-PDF)* scheme is aimed at attracting motivated young researchers from across the country and abroad, and provide them with the *infrastructure and financial support to engage in creative, high-quality work in their discipline / area of interest.* The fellow will work under a faculty-mentor from an academic unit of the University. The training will provide them with a *platform to grow as an independent researcher and potential faculty member of high-quality.* In addition to research, a fellow may be assigned teaching responsibilities, depending on their interest, to support and complement ongoing and / or initiate new programs in the respective academic unit as per the mandate of IoE.

School of Computer and Information Sciences (SCIS) Invites applications from eligible candidates for the IoE-Post Doctoral Fellowship (IOE-PDF).

#### **Essential Qualifications:**

**1.** PhD in Computer Science and other related disciplines or must have submitted their PhD thesis and are awaiting award of the degree.

#### Desirable Qualifications:

- 2 papers published in refereed international journals (SCOPUS/WoS indexed) or CORE Ranked conferences <u>http://portal.core.edu.au/conf-ranks/</u>
- **2.** The candidate should possess strong research track record with good publications where he is the first or corresponding author.

Final selection will be based on an in-person interview of shortlisted candidates, which they have to <u>attend at their own expenses</u>. No TA/DA will be paid for attending the interview or at the time of joining.

Hybrid mode interviews are also possible for candidates with due reasons, provided the candidate notifies about it well in advance.

#### Total Vacancies: 15 (UR=5; EWS=2; OBC=4; SC=3; ST=1)

It may be noted that merely satisfying the minimum eligible conditions does not guarantee shortlisting or selection. The university reserves the right to fill as many vacancies as it decides (i.e. not all vacancies may be filled).

#### Shortlisting of the candidates will be based on:

1. A matching of the research interests between candidates and faculty members whose specific areas of interest are mentioned below in the table. Each candidate must get consent from at least one faculty to mentor/host the candidate. A faculty member might preferably

give consent to a maximum of three candidates. **Note:** A faculty member cannot host more than one PDF.

- 2. Consenting faculty member should ensure that he/she has sufficient infrastructure/facilities to achieve the objectives of the research program. Lab space and appropriate seating space is a minimum requirement. Ideally computational resources might also be available. Dean reserves right to assign seating space and locations for the selected candidates.
- 3. The candidate should possess strong research track record with good publications where he is the first or corresponding author.
- 4. Experience: Number of years relevant to the research program.

SCIS Website: <a href="https://scis.uohyd.ac.in/">https://scis.uohyd.ac.in/</a>

		Name of		
	Name	Faculty		
	of	member and	Areas of	
SI.No	Schoo	contact email	research/Intere	Any specific research topic of interest? / Broad
	1	address	st	description of study to be taken by the scholar
				My current research focuses on cloud computing
				(scalability/fault tolerance, serverless computing,
				dynamic deployment with solutions such OASIS
				TOSCA, Kubernetes etc.), mobile cloud, Internet of
				Things, fog computing (developing simulators,
				mobility aspects, scheduling & placement strategies,
				etc.), distributed data processing on edge-fog-cloud
			Cloud	continuum (edge analytics, federated learning,
			computing,	including data pipelines) and large-scale data
			distributed	analytics on the cloud (algorithms and working with
			computing,	distributed frameworks such as Apache Hadoop,
			Internet of	Spark, Flink etc.). The list is not exhaustive, and I am
			Things, fog	interested in any concrete research you would like
		Dr. Satish	computing,	to perform, in and around these topics. Interested
		Narayana	federated	candidates should approach me first on
		Srirama	learning and	satish.srirama@uohyd.ac.in along with a two-page
			large-scale data	report describing the research challenges you would
		satish.srirama	analytics on the	like to address during the Postdoc period, along with
1	SCIS	@uohyd.ac.in	cloud	a detailed methodology.
		Anjeneya	Graph	
		Swami Kare	Algorithms and	Influence Meximination and Dumon minimization is
2	SCIS	askcs@uonyd.		
Z	3013	dC.III	Analysis	Social Networks
				encounter and perform poorly in upseen domains in
				real-world applications. Also, detecting deep fake
				forgeries in videos is not an easy task. From digital
				forensics perspective. Image/Video forgery
		Dr Digambar	Image/Video	detection has a very important role in helping
		Pawar	forgerv	multimedia forensic investigator. In this study.
		dpr@uohyd.ac	detection and	DeepFake forgery detection and localization in
3	SCIS	.in	segmentation	Images and/or Videos will be carried out.
			~	The scholar is expected to work on device free
			Wireless Sensor	wireless sensing of non-intrusive nature. It requires
			Network, IoT,	knowledge of sensor network, wireless
		Prof. Siba	Wireless	communication, signal intelligence and machine
		Kumar Udgata	Communication	learning. The scholar is expected to work on high
		udgata@uohy	, Machine	volume of streaming data using high performance
4	SCIS	d.ac.in	Learning	computing system and also the embedded devices.

		Dr. Avatharam	Rough neuro	
		Ganivada	computing and	
F	SCIE	avatharg@uon	applications of	Fuzzy neuro computing tools for moving object
5	3013	yu.ac.iii	Software	
			Defined	
			Networking.	
			Named Data	
			Networking,	
			Network Traffic	
			Analysis,	
		Dr. M A	Network	
		Saifulla	Management,	
c		saifullah@uoh	Data Center	Network management for named data networking
6	SCIS	yd.ac.in	Products	and hybrid networks
				networks that are binartite or beterogeneous
				networks where the nodes and edges may be of
				different types is of great interest. Huge number of
				algorithms are available for community detection in
				unipartite networks. Proposing scalable algorithms
				for bipartite and heterogeneous networks is an
				objective. It will also be interesting to tackle
		S. Durga		heterogeneous networks from the point of view of
		Bhavani		network representation in order to utilize the
7	SCIS	sabcs@uonya.		framework of graph neural networks in the deep
/	3013	T Sobha Rani	Bioinformatics+	
		sobharani@uo	machine	
8	SCIS	hyd.ac.in	learning	Disease network construction and analysis
		Prof. Alok		
		Singh		
		alok@uohyd.a	Metaheuristic	Application of Metaheuristic Techniques in
9	SCIS	c.in	Techniques	Manufacturing and Logistics
				The Scholar must have a background in Machine
				Learning and Deep Learning, Pattern Classification
				new algorithms and approaches to classify poorly
				labelled data sets or to boot strap classification and
				discover class structures in data sets from Hyper
				Spetral Images and other high dimensional data
			Novel methods	sets. Methods might also be applicable to Health
		Prof. Atul Negi	of Semi	domain. Methods might also involve distributed
		atul.negi@uoh	Supervised	machine learning or federated learning for very
10	SCIS	yd.ac.in	Classification	large data sets.
		Prot. Rajeev		
		wankarce@ue	Cloud	
11	SCIS	hvd.ac.in	Computing	Serverless computing Kubernetes load balancing
10	SCIS	Prof. Atul Negi atul.negi@uoh yd.ac.in Prof. Rajeev Wankar wankarcs@uo hyd.ac.in	Novel methods of Semi Supervised Classification Cloud Computing	new algorithms and approaches to classify poorly labelled data sets or to boot strap classification and discover class structures in data sets from Hyper Spetral Images and other high dimensional data sets. Methods might also be applicable to Health domain. Methods might also involve distributed machine learning or federated learning for very large data sets.

#### ELIGIBILITY AND OTHER CONDITIONS

1. Candidates from UGC recognized (public or private) institutions or institutions of national importance or from international institutions (NRI/PIO/ Foreign nationals) with degree awarded not more than three years prior to the date of announcement of this call for

applications. In the case of Indian nationals, a relaxation of two years will be provided to candidates belonging to OBC/EWS/SC/ST/Women/PwD categories, i.e the PhD should have been awarded not more than Five years from the date of announcement of this call for applications.

- 2. Candidates from UGC recognized (public or private) institutions or institutions of national importance or international institutions who have submitted their PhD and are awaiting award of the degree are eligible to apply upon submission of Provisional Certificate can also apply.
- 3. Applicants already in regular service are not eligible to apply.
- 4. Faculty members are not permitted to host/mentor SCIS students they have supervised or co-supervised for PhD as IOE-Post Doctoral Fellows.
- 5. The upper age limit for the fellowship is 32 years (at the time of the submission of application) and age relaxation of up to 3 (three) years will be given to candidates belonging to SC / ST / OBC (Non-Creamy Layer) / Women / PWD / EWS candidates (i.e. 35 years as the upper age limit).
- 6. The IOE-PDF is a purely temporary assignment, and is tenable for a period of one year from the date of appointment, renewable up to maximum of three years OR the end of IOE project, whichever is earlier. Candidates will not be eligible to claim this experience for any permanent position at the University of Hyderabad.
- 7. Extension beyond the one year tenure will be subject to availability of funds and review of performance. There will be rigorous assessment of yearly progress for the renewal of the Fellowship and is NOT automatic.
- 8. Notwithstanding any of the above-mentioned conditions, the tenure of all appointments will be co-terminus with the tenure of the IOE programme at the University of Hyderabad (which is currently 31/3/2024).
- 9. Arbitration of issues will be with University University authorities such as Dean SCIS, IOE Directorate and other competent authorities.

**FELLOWSHIP:** Rs. 55,000/- per month (consolidated) and Rs. 35,000 per month for candidates who have submitted the thesis and are awaiting award of degree.

**RESEARCH GRANT:** Rs. 50,000/- per annum is the grant eligible for selected IOE-PDFs. The grant can be used for consumables, contingencies, and domestic travel-for attending conferences / research meetings / symposia). Purchase of items such as minor equipment, laptops, tablets, furniture or any other form of asset are not permitted.

The IOE-PDFs are not eligible to receive any other fellowship from any Government or non-Governmental source during the tenure of the fellowship. If availing any other fellowship / remuneration, s/he will have to resign from the same before accepting the IOE-PDF at UoH.  $\$ 

#### Deadline for applications: 30-04-2023

Government of India rules on reservation policy will be strictly followed in selections. The University reserves the right to reject all or any of the applications or cancel the call for applications without assigning any reason thereof.

Candidates should fill the following application and email it to <u>deanscis@uohyd.ac.in</u>

- In addition to producing the endorsement letter from the mentor, please also ensure that the consent to mentoring is also communicated to the dean by email by the respective faculty.
- Please limit the detailed research proposal to a maximum of 10 pages.

In addition to email, please **post the filled application** to following address with marking as IOE-PDF application:

Dean, School of Computer and Information Sciences, University of Hyderabad, Gachibowli, Hyderabad, Telangana 500046, India.

**Note**: Please produce proof that it is posted before the deadline 30-4-2023.



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# **IOE - PDF APPLICATION FORM-**

## NAME OF SCHOOL/DEPARTMENT/CENTRE.....

Please fill the application form along with all required documents and submit by email to: .....@uohyd.ac.in).

This form along with annexures maybe converted into a single pdf file and sent by email to the contact address:

APPLICANTS PERSONAL DETAILS				
NAME				
GENDER				
DATE OF BIRTH AND AGE				
NATIONALITY / SOCIAL STATUS / CATEGORY				
PERMANENT ADDRESS				
ADDRESS FOR CORRESPONDENCE				
APPLICANTS PROFESSIONAL DETAILS				
DETAILS OF QUALIFICATIONS (IN REVERSE CRONOLOGY). INCLUDE NAME OF THE DEGREE, YEAR OF PASSING, CLASS/DIVISION OBTAINED AND NAME OF THE UNIVERSITY .	COPIES OF CERTIFICATES ARE TO BE ATTACHED AS ANNEXURE			

SUMMARY OF PHD WORK (SYNOPSIS OF THESIS)	ATTACH AS ANNEXURE						
AREA OF SPECIALIZATIONS							
DETAILED CV WITH PREVIOUS POST DOCTORAL EXPERIENCE, IF ANY, LIST OF PUBLICATIONS, IF ANY AND NAMES OF THREE REFEREES (ENCLOSE A MAXIMUM OF 3 REPRINTS)	ATTACH AS ANNEXURE						
SUMMARY OF YOUR RESEARCH EXPERIENCE AND SKILL SETS	ATTACH AS ANNEXURE						
APPLICANTS PROPOSED RESEARCH ACTIVITY							
DETAILS OF RESEARCH PROPOSAL WITH CLEAR OBJECTIVES, DELIVERABLES & MILESTONES ETC	ATTACH AS ANNEXURE						
NAME AND AFFILIATION OF OF FACULTY MEMBER WHO HAS AGREED TO MENTOR THE APPLICANT	ATTACH ENDORSEMENT LETTER FROM THE MENTOR						

I/WE STATE THAT THE APPLICATION IS COMPLETE IN ALL RESPECTS AND ALL INFORMATION IS CORRECT. I/WE UNDERTSAND THAT IF ANY OF THE INFORMATION PROVIDED IS FOUND TO BE FALSE, THE FELLOWSHIP WILL BE TERMINATED IMMEDIATELY AND THE APPLICANT WILL BE LIABLE TO REFUND THE FELLOWSHIP RECEIVED.

Name and signature of the applicant:

Signature/date

Name of faculty mentor (if relevant):

Signature/ date

(Digital signature is acceptable in advance)

Project Proposal format:

- a) Title of the Research Proposal \_
- b) Name and Affiliation of Faculty mentor (if endorsement received)
- c) Abstract (maximum 300 words).
- d) Introduction
- e) Origin of proposal
- f) National and International status
- g) Hypothesis/ Detailed Methodology
- h) Expected outcome such as new inventions/discoveries, publishing quality papers/articles, book/book chapters, and others (200 words).
- i) Previous Research experience highlighting achievements, if any.