National School of Engineering and Science
Research in ICT
México

JOB: **6 – 8** Full-time Senior Professors at Tecnológico de Monterrey, Mexico

The School of Engineering and Science at Tecnológico de Monterrey, Mexico, invites applications for *6 – 8* full-time positions to outstanding scientists with a solid career in Computer Science, Telecommunications and related areas, to join our research initiatives in *bio-inspired computing*, *machine learning*, *data science*, and *electronics and telecommunications*, preferably with focus on applications in either health, engineering, security, business intelligence, social challenges, and also in the context of modern platforms such as the Internet of Everything or modern settings involving Big Data.

Tecnológico de Monterrey and ICT

Tecnológico de Monterrey, the leading private University in México, continues strengthening and renewing the commitment with its research strategy, making research an institutional priority to: significantly contribute to the quality of its teaching-learning process (Educate), transform the scientific and technological knowledge into innovative solutions that benefit society (Innovate) and transform, through knowledge generation and transfer, impacting the community in economic, political and social aspects (Investigate). Aimed to fulfill these objectives, Tecnológico de Monterrey has designed an action-research model, named Research that Transforms Lives, based on a collaborative, interdisciplinary and open innovation ecosystem, with participation of researchers, lecturers, professional and graduate students.

Research that Transforms Lives's objective is to be and engine that generates innovative solutions for the economic and social development of México. 40 Research Groups with Strategic Focus have been established where the scientific activity starts from a specific challenge, which is connected with a discipline and, more precisely, connected with specific topics and approaches. The entire scientific publication effort is carried out having in mind an application context, either to support the productive sector or to satisfy the communities' social demands on issues such as health, food, education, housing, security, transportation, business, public policy, among others.

The Institution is the leader in patent applications in Mexico, and the private university with the highest number of research professors who are members of the

Mexican National System of Researchers. The successful candidates will be engaged in developing methods and algorithms within one of the following research areas: *bio-inspired algorithms, machine learning*, *analytics*, *embedded systems,* or *security and telecommunications,* and shall be based at either Campus Monterrey, Campus Guadalajara or Campus Metropolitan Zone of Ciudad de México (Atizapán), depending on the research group, institutional needs and the candidate profile, though positions on electronics or telecommunications are only open in Guadalajara.

The current research groups are very active, working in a variety of projects and publishing in JCR Q1/Q2 journals and at major conferences (*GECCO, CEC, ESORICS, RAID*, *ECAI*, *ICPR, ICDM, IJCB*, and the like). We are currently developing several parallel research lines including **clustering, classification ensembles, hyper-heuristics, time-series analysis, intrusion prevention systems, pattern recognition, electronics of embedded systems, and systems on chip, among others**.

Qualifications

We are looking for highly motivated and creative scientists with a strong background in Computer Science or Electronics and/or Telecommunications and interested in both developing new algorithms as well as robust, usable systems suitable for the analysis and the solution of complex problems in various domains. The applicants shall have the desire and ability to work in an interdisciplinary team.

Additional requirements are:
- Research experience confirmed by publications in renowned international journals indexed in ISI (Web of Science) and/or Scopus, including at least 15 JCR publications or equivalent (for reference, in Mexico, this would amount to at least an SNI rank I researcher.) The successful candidate is expected to have a strong publication record in the last five years.
- Strong experience and commitment to supervise the thesis work of graduate research students.
- To enjoy teaching; in particular, the successful applicant should be passionate about several teaching methods (such as project-based learning, or problem-based learning, etc.), instructional strategies (such as flipped classroom, serious learning, etc.) and should love to innovate during lecture time. The successful participant is expected to teach 4 courses per annum.
- Strong experience attracting funds, which should be evidenced by grants the applicant has obtained and which are expected to amount to USD 100,000.
- Enthusiasm for working with other colleagues, adapting to new environments, intercultural skills, etc.
- The ability to communicate fluently in written and spoken English.
- Strong programming expertise, e.g., in MATLAB and C, C++, or Python, R.

Compensation:

- **Full-time position**
- **A competitive remuneration package will be offered (monthly salary, social security, medical insurance, savings fund, holiday bonus, vacation bonus, groceries coupons, and relocation help) in Mexican pesos.**

Application requirements:

- **Detailed CV including a list of publications, awards and recognitions, and potential start date.**
- **Short statement of previous work, research interests and his/her future vision on the field.**
- **Three letters of recommendation.**
- **PDF of three recent publications considered by the candidate as being significant of his/her research work.**

Interested applicants should send documentation or inquiries to:

- **Dr. Raúl Monroy (raulm@itesm.mx), Dr. Hugo Terashima-Marin (terashima@itesm.mx) and Dr. David Muñoz (dmunoz@itesm.mx).**
- **Please use as subject for your email: ITESM – EIC – ICT Position, interest in (choose one) <bioinspired algorithms, machine learning, data science, electronics or telecommunications>**

At Tec de Monterrey we work under a principle of equal opportunities and do not discriminate on the basis of ethnicity, nationality, gender, sexual orientation, marital status, health status, religious beliefs, political doctrine or disability.