CONTRATO Ref: 94/2021

Requisitos para participar en la convocatoria:

-Tener nacionalidad española o permiso de trabajo, o alguna otra nacionalidad que permita el acceso al empleo del sector público. En caso de no tenerla y resultar esta persona seleccionada, el contrato no se formalizará hasta que la documentación correspondiente esté en regla. En caso de que finalmente no se consiga finalizar este trámite dentro del plazo de dos meses desde la concesión la persona seleccionada no podrá ser contratada; dejando, en este caso, la plaza desierta o contratándose a la siguiente persona en caso de que se haya dado orden de prelación en la resolución.
- Tener cumplidos 16 años y no exceder, en su caso, de la edad máxima de jubilación forzosa o de aquella otra que pueda establecer por ley.
-La Fundación y/o el Tribunal, por razones de interés para la entidad, podrán desistir en cualquier
momento de la resolución o cancelación de esta Convocatoria, sin mediar justificación alguna.

Título Proyecto de Investigación: PRAETORIAN. Protection of Critical Infrastructures from advanced combined cyber and physical threats.

PRAETORIAN: Protection of Critical Infrastructures from advanced combined cyber and physical threats.
Strategic goal is to increase the security and resilience of European CIs, facilitating the coordinated protection of interrelated CI against combined physical and cyber threats. To that end, the project will provide a multidimensional (economical, technological, policy, societal) yet installation-specific toolset comprising: (i) a Physical Situation Awareness system, (ii) a Cyber Situation Awareness system; (iii) a Hybrid Situation Awareness system, which will include digital twins of the infrastructure under protection; and (iv) a Coordinated Response system. The PRAETORIAN toolset will support the security managers of Critical Infrastructures (CI) in their decision making to anticipate and withstand potential cyber, physical or combined security threats to their own infrastructures and other interrelated CIs that could have a severe impact on their performance and/or the security of the population in their vicinity. The project
will specifically tackle (i.e. prevent, detect, response and, in case of a declared attack, mitigate) human made cyber and
physical attacks or natural disasters affecting CIs. It will also address how an attack or incident in a specific CI can jeopardise the normal operation of other neighbouring/interrelated CIs, and how to make all of them more resilient, by predicting cascading effects and proposing a unified response among CIs and assisting First Responder teams.
PRAETORIAN is a CI-led, user-driven project, which will demonstrate its results in three international pilot clusters –some of them cross border– involving 9 outstanding critical infrastructures: 2 international airports, 2 ports, 3 hospitalsand 2 power plants.

Servicio / Unidad / Grupo Acreditado: UNIDAD MIXTA DE INVESTIGACION EN TICS APLICADAS A LA REINGENIERÍA EN PROCESOS SOCIOSANITARIOS (ERPSS),

Requisitos de los candidatos: *(Todos los requisitos que se exijan en este apartado serán imprescindibles para poder optar al puesto):*
PhD Computer Science, Machine Learning or related field

Méritos a valorar: *(Se valorarán los méritos relacionados con la actividad/funciones a desarrollar) (de 0 a 5 puntos)*
Demonstrated previous working experience in massive structured data analysis (2 points). 0.50 points will be assigned to those applicants with a minimum of 2 years' experience gained after the completion of the university degree. For each additional year in which the applicant has performed this type of analysis 1 point will be assigned up to a maximum of 2 points. Applicants should briefly explain (5 lines or less) the extent of their involvement in the analyses and the type of analysis carried out. Working periods less than one year will be prorated by months.
Demonstrated previous working experience in massive unstructured data analysis (1 point). 0.50 points will be assigned for each year in which the applicant has performed this type of analysis up to a maximum of 1 point.
Applicants should briefly explain (5 lines or less) the extent of their involvement in the analyses and the type of analysis carried out. Working periods less than one year will be prorated by months.
Demonstrated previous experience with relational databases (for example: PostgreSQL, MySQL…; 0.5 points)0.25 points will be assigned for each year in which the applicant has worked with relational database up to a maximum of 0.5 points. Applicants should briefly describe (3 lines or less) their experience on this field. Working periods less than one year will be prorated by months.

Demonstrated previous experience in Real World Data projects (0.5 points). 0.25 points for each project in which the applicant has participated as a contracted researcher up to a maximum of 0.5 point and 0.125 points for each project in which the applicant has participated as a collaborating researcher up to a maximum of 0.5 point.

Applicants must indicate whether they have been involved as a contracted researcher or a collaborating researcher.

Proficiency with relevant programming languages such as Python, R, C++, SAS or Java (0.4 points). 0.2 points will be assigned to those applicants with a minimum of 2 years' experience in any of the above mentioned programming languages gained after the completion of the university degree; 0.1 points will be assigned for each extra programming languages in which the applicant can demonstrated a minimum of 1 year experience up to 0.2 points.

Expertise in visualization and data analytics tools (SAS, Tableau, Microsoft Power BI, MongoDB, Spark, Elasticsearch (0.6 points) 0.1 points will be assigned to those applicants with a minimum of 2 year' experience in any of the following tools: Tableau, Microsoft Power PI, MongoDB or Spark; 0.3 points will be assigned to those applicants with a minimum of 1 year' experience using SAS; 0.3 points will be assigned to those applicants with a minimum of 1 year' experience using Elasticsearch. Applicants should briefly explain (5 lines or less) their degree on knowledge regarding the indicated tools.

Currículum vitae y Expediente Académico *(de 0 a 2 puntos)*
Post-doctoral stays in other universities or research centre different from the one where the PhD was conferred in which the applicant has carried out research projects in the field of Big Data, Intelligence Artificial, Machine Learning or related to the required requirements will be evaluated (0.4 points). 0.1 points will be assigned for each year up to a maximum of 0.4 point. Stays must have a minimum duration of 12 consecutive months. Applicants must indicate the duration of the post-doctoral stay.

Publishing Track Record (0.5 points). Scientific publications, belonging to the first or second quartile, in the field of Big Data, Intelligence Artificial, Machine Learning or related to the required requirements will be evaluated. Applicants must indicate the order of authorship, the impact factor of the journal and the quartile ranking in the year their article was published and the Digital Object Identifier. 0.1-0.2 points will be assigned for each publication as first, second or corresponding author up to a maximum of 0.5 points.

Awarding research grants (excluding Erasmus grants) (0.2 points). 0.1 or 0.2 points will be assigned for each research grant funded by national, European or international funding agencies, respectively up to a maximum of 0.2 points. Applicants must indicate the funding agency.

Teaching experience in the field of Big Data, Intelligence Artificial, Machine Learning or related to the required requirements (0.3 points). 0.1 points will be assigned for each degree or Master's course given up to 0.3 points

Direction of TFM and/or TFG theses in the field of Big Data, Intelligence Artificial, Machine Learning or related to the required requirements will be evaluated (0.2 points). 0.1 points will be assigned for each of them up to a maximum of 0.2 points. Applicants must attach a certificate proving the above-mentioned merits.

Thesis direction (0.4 points). 0.2 points will be assigned per thesis up to a maximum of 0.4 points.

Otros Méritos: *(Formación complementaria) (de 0 a 1 punto)*
High level of English language ability certified by an official body (0.2 points) (C1: 0.1 point; C2: 0.2 points). Applicants must enclose with their application a certificate attesting it.

Functional Diversity equal to or greater than 33%. (0.1 point). Applicants must enclose with their application a certificate attesting it.

Experience in European research projects as a full-research team member (0.4 points). 0.2 points will be assigned for each year up to maximum of 0.4 point. Contracts must have a minimum duration of 6 consecutive months.

Profound understanding of data integration and management concepts e.g. FAIR principles (0.1 point)

Working knowledge of healthcare databases (0.2 point) 0.1 points will be assigned for each year up to maximum of 0.2 point. Contracts must have a minimum duration of 6 consecutive months

Entrevista: *(de 0 a 2 puntos)*
Si procede (Se hará entrevista si la diferencia entre el primer candidato y el segundo es igual o inferior a dos puntos)

Actividad Formativa / Funciones a desarrollar:
Attend all the national and international PRAETORIAN meetings and present the corresponding reports and deliverables.
Coordinate and supervise the periodic and final reports to the European Commission Supervision of the institution financial reports of the European project.
Contribute and promote the European project publicity and results dissemination.
Support in all the activities related to the data management and data analysis, monitoring of indicators and risk assessment.
Support and supervision of the scientific and technical deliverables of the whole consortium of the European project
Prepare and draft EC technical and financial progress reports in conformity with Commission's guidelines.
Dissemination of scientific and technological knowledge generated within the context of the project.
Access, creation and structuration of the project data base Use case and pilot scenario definition, development and evaluation

Características del Contrato:
      -Jornada completa
      -Cuantía del Contrato: 35.200,00 € brutos/año
      -Duración del Contrato: 6 renewable extendable according to economic availability or until the end of the Project
      -Dedicación Exclusiva.

Plazo de finalización de entrega de solicitudes: 27/07/2021

Documentación a aportar On-Line www.iislafe.es

      -Currículum Vitae Actualizado.
      -Expediente Académico con nota media.
      -Documentos acreditativos de la Titulación Académica exigida.
      -Documentación que justifique todos los méritos reseñados.

La acreditación de la experiencia laboral deberá hacerse necesariamente mediante Vida Laboral expedida por la Tesorería de la Seguridad Social, acompañada de contratos de trabajo o documento admisible en derecho, que acredite fehacientemente la profesión y la categoría laboral. El grupo de cotización a la Seguridad Social del informe de vida laboral debe estar en concordancia con la categoría laboral expresada en el contrato de trabajo o documento equivalente, en caso de discrepancia, se tendrá en cuenta el reflejado en la vida laboral. Cualquier certificado laboral, nómina o contrato no se considerará si no va acompañado de la vida laboral.

*La documentación presentada a este concurso público quedará en depósito en el IIS La FE.