

Opportunity Title: Leveraging AI to Address Selected Drivers of Instability in

Opportunity Reference Code: ICPD-2025-52

Organization Office of the Director of National Intelligence (ODNI)

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How to Apply Create and release your Profile on Zintellect - Postdoctoral applicants must create an account and complete a profile in the on-line application system. Please note: your resume/CV may not exceed 3 pages.

> Complete your application - Enter the rest of the information required for the IC Postdoc Program Research Opportunity. The application itself contains detailed instructions for each one of these components: availability, citizenship, transcripts, dissertation abstract, publication and presentation plan, and information about your Research Advisor co-applicant.

> Additional information about the IC Postdoctoral Research Fellowship Program is available on the program website located at: https://orise.orau.gov/icpostdoc/index.html.

> If you have questions, send an email to ICPostdoc@orau.org. Please include the reference code for this opportunity in your email.

Application Deadline 2/28/2025 6:00:00 PM Eastern Time Zone

Description Research Topic Description, including Problem Statement:

Automated link analysis generation using KG technology is used to address Violent Extremist Organizations (VEOs) and illicit trafficking of wildlife and natural resources, significant threats to African country stability. Al aggregates analytically relevant data to illuminate the "what is happening", including organization hierarchy, locations, key members, relationships between entities, and related events/activities. The project will develop domain-specific ontologies, evaluate KG accuracy, produce lectures/papers, and engage with African partners.

Example Approaches:

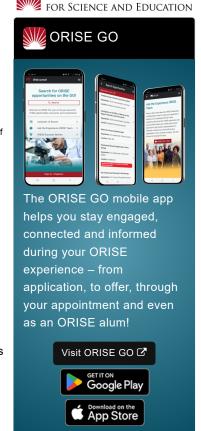
This work is the next step of several projects leveraging AI to extract relevant information from open-source data. Previous projects include: 2019 SABLE SPEAR

https://www.cia.gov/static/ArticleSableSpearExperimentInAl.pdf; and 2022 COMMON SWIFT: https://www.diu.mil/latest/DIU-successfully-transitionsprototypes-to-counter-foreign-malign-influence

Relevance to the Intelligence Community::

FY2022-2026 Investment Landscape--critical/non-traditional indicators of nation-state instability

Key Words: Knowledge Graph (KG); domain specific ontologies; taxonomies, adherence to best practices; KG evaluation---accuracy, completeness, data provenance, transparency, and ethical AI/ML employment; test sample KGs against developed criteria; linking



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convergences within multiple KGs; acquire and review publicly available and commercially available data sets; normalizing data sets to provided ontologies; AI/ML applications in IC

Qualifications Postdoc Eligibility

- · U.S. citizens only
- Ph.D. in a relevant field must be completed before beginning the appointment and within five
 years of the appointment start date
- Proposal must be associated with an accredited U.S. university, college, or U.S. government laboratory
- Eligible candidates may only receive one award from the IC Postdoctoral Research Fellowship Program

Research Advisor Eligibility

- Must be an employee of an accredited U.S. university, college or U.S. government laboratory
- · Are not required to be U.S. citizens

Point of Contact Keri Tarwater

Eligibility

- Citizenship: U.S. Citizen Only
- Requirements
- Degree: Doctoral Degree.
- Discipline(s):
 - Chemistry and Materials Sciences (12 •)
 - Communications and Graphics Design (3_●)
 - Computer, Information, and Data Sciences (17_⑤)
 - Earth and Geosciences (21 ●)
 - Engineering (27 ●)
 - Environmental and Marine Sciences (14 👁)
 - Life Health and Medical Sciences (45 ●)
 - Mathematics and Statistics (11)
 - Other Non-Science & Engineering (2.●)
 - Physics (<u>16</u> ●)
 - Science & Engineering-related (1...)
 - Social and Behavioral Sciences (<u>30</u> ●)

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