



**2017-2018 Academic Year  
Office of Science and Technology, Research Division  
Placement ID: Digital**

**Topic Area:** Digital Forensics and Multimedia Analysis

**Program Overview:** NIJ is interested in stimulating a scientifically rigorous body of research on the topic of Digital and Multimedia Forensic Analysis. The use of evidence from digital and multimedia forensics in criminal investigations has expanded in recent years. This type of evidence has the potential to offer a quick and cost-effective way to identify suspects and to corroborate or discredit alibis. Yet little is known about the impact of digital forensics on prosecution outcomes, and the prevalence of its use in courts as evidence.

**Research assistant project task responsibilities may include but are not limited to:**

- Compiling, reviewing, and annotating literature on selected research topics, including continued review of research university research to pair with the NIJ/RAND report, *Digital Evidence and the U.S. Criminal Justice System*.
- Maintaining and updating literature review matrix/spreadsheets on research topics.
- Maintaining and updating databases on research topics.
- Assisting in developing research questions and designs for intramural studies, including machine learning and artificial intelligence in digital forensics, and/or the challenges faced by law enforcement through the criminal use of encryption.
- Assisting in preparing materials for Institutional Review Board review for intramural studies.
- Assisting in conducting data analyses and report writing for intramural projects, including *Digital Evidence in the U.S. Court System*.
- Assisting with publications and presentations (specific outlets to be determined).
- Regularly revising and updating NIJ web topic pages on assigned research topics.
- Coordinating and collaborating with federal partners on assigned research topics.

**Candidate Eligibility Criteria**

- Demonstrated knowledge of basic research, fundamental, applied, and evaluation methods and analyses **required**.
- Demonstrated knowledge of the U.S. criminal justice system **preferred**.
- Demonstrated knowledge of digital forensics **preferred**.
- Demonstrated knowledge of courtroom operations **preferred**.
- Demonstrated knowledge of machine learning and artificial intelligence **preferred**.

**General Required Qualifications**

- Education and/or Experience: Doctoral students working toward a terminal degree (e.g., Ph.D., D.P.A., Dr.PH., D.H.Sc., D.S.W., Psy.D., Ed.D.) in science, technology, mathematics, statistics, or criminal justice/criminology programs.
- Mathematical Skills: Very good to advanced understanding of statistical principles and research methods (quantitative and qualitative).



- **Computer Skills:** Working knowledge of computers and standard software such as Adobe Professional, Excel, Internet Explorer, Outlook, Windows operating systems, Word, and PowerPoint required. Proficiency using, SPSS, SAS, Stata, ESRI ArcMap (9.3 or later), and Relational databases.
- **Reasoning Ability:** Ability to work independently, accurately, and in a timely manner.
- **Communication Skills:** Ability to communicate orally and in writing to prepare comprehensive research reports, proposals, and presentations and make recommendations to accomplish and enhance project objectives
- **Certifications, Licenses, Registrations:** Human Subjects (HS) Protection training is required. NIJ research assistants must take annual HS training onsite at the Office of Justice Programs. RAs also must successfully complete [CITI training](#) prior to participating on any studies.
- **Background Check:** Candidates must complete all required U.S. Department of Justice profile and pre-screening paperwork with all security reviews and background investigations (such as credit and criminal investigations) resulting in a favorable adjudication.
- **Citizenship:** Candidates must be U.S. citizens.

**Work Location:** Primary work location will be at [NIJ's offices in Washington, D.C.](#) Minimal local travel in the [National Capital Region](#) may be needed to attend meetings and visit offsite research facilities.