Research Assistant (Al for Forensics)

Supervisors: Dr. Yigun Chen, Dr. Michael Rosenblum, and Dr. Brian Caffo

Start Date: Flexible; ideally before winter break.

Location: Hybrid, with physical meetings taking place in the Bloomberg School of Public

Health, JHU

Position Type: Paid, part-time and/or course credits

Position Summary: We are seeking <u>multiple motivated and intellectually curious research assistants (RAs)</u> to join our project studying how artificial intelligence (AI), especially large language models (LLMs) and visual language models (VLMs), have the potential to advance forensic science, drawing on current progress in related domains such as medicine and law. The project examines how AI can support tasks such as digital evidence analysis, probabilistic reasoning, and workflow optimization within forensic contexts. In addition to surveying the landscape, the RAs will have broad freedom to <u>explore topics related to LLM evaluation</u>, <u>probabilistic reasoning</u>, <u>workflow optimization</u>, <u>building benchmarks for forensic science knowledge</u>, and other related threads in forensics.

Responsibilities:

- Conduct literature reviews on recent AI and LLM developments relevant to forensic science and adjacent disciplines.
- Implement and document computer experiments involving LLMs and related Al models.
- Contribute to internal research presentations and discussions.
- Meet regularly with supervisors to discuss progress and next steps.
- Assist with manuscript preparation and data documentation.

Preferred Qualifications:

- Strong programming skills in Python or R.
- Familiarity with LLM APIs and basic machine-learning research workflows.
- Enrollment in or completion of coursework in machine learning (e.g., EN.601.472/672, EN.601.475, or EN.601.482), or equivalent experience.
- Curiosity, independence, and strong communication skills.

Compensation: We can offer hourly pay and/or course credits; the exact compensation plan depends on the student's needs and campus regulations.

To Apply: Please send a brief paragraph of your intent to apply, your transcript, and a brief CV/resume highlighting relevant experience (such as sample code on GitHub) to yiqunc@jhu.edu with the subject line RA Application: Al for Forensics. Applications will be reviewed on a rolling basis until the position is filled.