



MASSACHUSETTS
GENERAL HOSPITAL



HARVARD
MEDICAL SCHOOL

RWE LAB

To:

Interested Undergraduate Students

From:

Hao Deng, MD MPH MBA DPRH(c)

Subject:

Open internship positions in AI and medicine

September 27, 2022

GENERAL SUMMARY/ OVERVIEW STATEMENT

The Real-World Evidence Laboratory at MGH DACCPM is currently looking for a candidate serving the role of student intern who will contribute to a variety of software development and data analysis-related tasks. The position requires strong project management and data analytic skills, experience with quantitative and qualitative data, close attention to detail and timelines, discretion in handling sensitive information, and strong interpersonal skills.

PRINCIPAL DUTIES AND RESPONSIBILITIES

Responsibilities may vary based on the department that is hosting the temp. Responsibilities could include:

- Maintaining and developing data algorithms and web applications for funded AI-related projects for scientific publications. Developing new and existing data analysis/web presentation/visualization tools.
- Meeting regularly with departmental research personnel to devise innovative and scientifically appropriate solutions to modeling and data analysis challenges.
- Working with research personnel to identify workflow issues and develop technical solutions, such as writing scripts to automate time-consuming or error-prone tasks.
- Producing documentation for technical and non-technical audiences.
- Assisting lab members with software-related questions and problem-solving, including tasks related to Linux and Windows system administration.

SKILLS/ ABILITIES/ COMPETENCIES REQUIRED

- Demonstrated ability to develop working prototypes balancing deliverability, performance and reliability in scope of a prototype. Demonstrated experience in developing performant and reliable production code.
- Familiarity with any of the following is a plus:
 - Python, R, SQL, Go.
 - Python/R with ML/AI toolkits (TensorFlow, Karas, PyTorch...) - Significant plus. · Linux, Nginx, Windows server.
 - AWS cloud computing, NLP analysis.
- The candidate must have the ability to work in a dynamic team environment that has frequent deadlines and unanticipated scope changes. A comprehensive understanding of application development, including analysis, coding, testing, and project life cycle methodologies, is required.
- Experience in developing medical-related applications is a plus.
- Excellent oral and written communication skills

LICENSES, CERTIFICATIONS, and/or REGISTRATIONS

Not Applicable

EDUCATION

- Undergraduate Degree required.
- Experience with AI/ML is a significant plus.

EXPERIENCE

- Advanced computer science, web development, and non-numerical data analytical knowledge is a must.
- Understanding of clinical research methodology and regulations is preferred.
- At least 2 year of experience in data management and web development is preferred.
- Good leadership, presentation, and writing skills, as well as, the ability to interact well with others, take the initiative and think independently, are essential.
- Experience with advanced skills in computer science and statistical programming languages (e.g., R, Python), which may have been gained from coursework or prior research experience.
- Capacity to manipulate and organize large amounts of Project Management experience is a plus