



**Tenure-Track Assistant Professor**

Yale School of Medicine  
Biomedical Informatics & Data Science

**Visiting Professor**

EPFL School of Computer Science  
Machine Learning & Optimization Lab

July 28, 2024

Job Description

# [Senior AI full-stack developer]

Biomedical Informatics & Data Science  
Yale School of Medicine  
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The **Laboratory of Intelligent Global Health and Humanitarian Response Technologies (LiGHT)** is looking for an **exceptional, creative, and highly organized senior full-stack developer to lead a team in creating and maintaining professional, open-source, actively deployed web and app-based critical software for global health.**

The role leads a mission for the genuine user-centered design of technologies within a vibrant and talented interdisciplinary community of collaborators in LMICs and NGOs.

## ABOUT YALE

The Department of Biomedical Informatics and Data Science [BIDS] in the Yale School of Medicine [YSM] has a mandate to create research, teaching, and service that ensures equity in the digital transformation of healthcare.

YSM, established in 1810, is a leading institution combining education, research, and clinical practice. With a long-standing commitment to excellence, it provides a dynamic environment with work recognized globally by several Nobel prizes and practice-changing innovation. Employees at Yale have the opportunity to work alongside respected scholars and top students and participate in a diverse range of programs.

## ABOUT LiGHT

LiGHT is a global community of exceptional academics, humanitarians, clinicians, volunteer open-source enthusiasts, and global health specialists. Our lab participates in the full cycle of implementable data-driven global health research, from clinical studies in LMIC communities to innovating novel optimization strategies that adapt our tools to these settings.

We build technologies that ensure local data ownership, and co-design tools with our long-term collaborations in South Africa, Tanzania, Rwanda, Nigeria, Switzerland, Namibia, Senegal, and several NGOs. Our group maintains a large portfolio of open-source technologies and foundation models, and we are committed to leveraging academia to ensure sustainable, implementable innovation to improve health care in resource-limited settings.

## YOUR PROFILE

- Exceptional, energetic, and organized with a high socio-emotional intelligence
- Growth mindset and passion for providing social good at individual and global scales
- Experience in empathetic, engaging team leadership for large-scale professional-grade software development
- Meticulous attention to detail with a deep commitment to ensuring accessibility to open-source software through quality, transparent documentation, and attention to detail.
- Superb communication skills and ability to engage comfortably with a team of young students
- Passionate about teaching and investing time in skill development
- Comfortable in a multi-project lab



## YOUR MISSION

- Create and maintain professional-grade actively deployed digital health software that allows experts to interact with and validate AI models
- Lead a team of students and researchers in an empathetic and motivating learning environment to foster a culture of quality-first coding and open-source development
- Supervise several projects in engaging app and web development with a deeply ingrained user-centered design approach

## SKILLS REQUIRED

- Fluent communication in English (speech and writing)

### Technical Skills:

- **Front-End:** Proficiency in HTML, CSS, JavaScript, and modern frameworks like React, Angular, or Vue.js
- **Back-End:** Strong experience with server-side languages and frameworks such as Node.js, Python (Django, Flask).
- **Database:** Experience in SQL and NoSQL databases such as MySQL, PostgreSQL, MongoDB, or similar
- **API Development:** Experience with API design and implementation
- **Version Control:** Full Git proficiency
- **DevOps:** Familiarity with CI/CD pipelines, containerization (Docker), and orchestration (Kubernetes)
- **Cloud Services:** Experience AWS, Azure, or Google Cloud
- **Testing:** Unit testing, integration testing, and end-to-end testing frameworks
- **Security:** Understanding of web and mobile application security best practices

### Experience:

- Minimum of 5 years in full-stack development, with at least 2 years in a senior or lead role.
- Demonstrated ability to manage complex projects, including timelines, deliverables, and team coordination.

## SKILLS PREFERRED

- Digital health experience
- **Mobile Development:** Experience with mobile app development frameworks such as React Native or Flutter.
- **Open Source Contributions:** Active participation in the open-source community.
- **MLOps:** Experience with deploying and managing AI models in production environments. Proficiency with tools and frameworks like TensorFlow is a plus

## WE VALUE

- Creativity
- Passion
- Humor
- Kindness
- Organization
- Rigor
- Autonomy
- Diversity
- Openness&Transparency
- Adventure
- Generosity
- Hard work

## WE OFFER

An exciting and dynamic environment in a very talented and motivated international team.  
Strong potential impact in research, applications, and the open-source community.



**Start date:** ASAP  
**Term of employment:** Fixed-term  
**Work rate:** 100% (Must be based in the US)  
**Duration:** 1 year fixed-contract. with possible extension

**APPLY:** via the LiGHT lab website <https://www.yale-light.org/join-us>

