Principal Engineer

higheredjobs.com/search/details.cfm

Type: Full-Time
Salary: $102,300 - $179,100 per year
Posted: 52 days ago
Category: Other IT
Military

HARVARD UNIVERSITY

Company Description

By working at Harvard University, you join a vibrant community that advances Harvard's world-changing mission in meaningful ways, inspires innovation and collaboration, and builds skills and expertise. We are dedicated to creating a diverse and welcoming environment where everyone can thrive.

Why join Harvard Law School?

Join a community that combines excellence in legal education and scholarship with a deep commitment to justice. Here at Harvard Law School (HLS), you'll find an environment that values who you are and encourages you to grow, inspire others, and make a meaningful

impact. Wherever you are in your career journey, HLS is a place where you can thrive, contribute, and be part of something bigger.

Job Description

The Institutional Data Initiative (IDI) is a new research center working to advance society's relationship with knowledge by expanding access to, and deepening our understanding of, the data that underpins AI. By collaborating with library, government, and academic institutions to publish their knowledge collections as AI training sets, IDI seeks to 1) empower those institutions and the cultures they represent, 2) build a foundational pipeline for academic inquiry of AI, and 3) advance the state of the art for all builders of AI systems.

IDI's work spans the AI data ecosystem-from digitization, data structuring, and metadata synthesis, to safety and security analysis, all the way through to benchmarking and the development of ethical and governance frameworks. Institutional collaboration forms the gateway to this work and IDI places a particular emphasis on opportunities with institutions that expand the cultural breadth of knowledge represented in the building blocks of AI.

At its core, IDI is a data practice around which other interdisciplinary work is convened. While theory and analysis are critical components of IDI's work, our impact is a direct factor of our ability to ship novel data. As such, IDI's workflows resemble those of a product studio. Our projects are time-bound and scopes are driven by ambition within time constraints. Our team structure is relatively flat and each member is expected to bring vision for their work and drive it through to completion. We prioritize interdisciplinary collaboration with academic contributors, both internal and external, as essential work that prevents the commodification of the data we help to publish.

The technical capabilities of our Principal Engineers define the depth of analysis and inquiry at IDI while developing and deploying repeatable methods and pipelines. The person in this role will have an ability to think creatively about extracting and manipulating data to unlock knowledge collections that have been stubbornly inaccessible, sometimes for centuries. Their understanding of machine learning and AI fundamentals will help identify areas of high impact and utilize models to facilitate this work. Each Principal Engineer must bring a unique set of skills and approaches to a team of engineers whose distinct capabilities complement the whole. This team works together to build an action plan for each corpus that takes it from uncharted territory to a well-defined map that others can traverse.

Beyond data, Principal Engineers also contribute to the building of community around IDI's work to enable outside collaborators-fellow technologists, academics, students, cultural stakeholders-to expand our capabilities, capacity, and perspectives. IDI operates within Harvard and alongside the Library Innovation Lab, the Berkman Klein Center, and the Applied Social Media Lab; engaging these communities, among others, is critical to delivering on our mission.

As a Principal Engineer, you will:

- Develop, refine and evaluate methods for analyzing and augmenting corpora.
- Research, train and evaluate machine learning models.
- Research, adjust and evaluate natural language processing techniques.
- Write and contribute to open-source software.
- Conduct an ongoing technology and research watch in areas pertinent to IDI's focus, including: generative AI, natural language processing, digital preservation and open knowledge.
- Provide technical leadership and guidance to both your team members and your project peers.
- Help build and lead development of multiple discrete projects at once.
- Draft technical and scientific communications outlining datasets and novel methodologies developed in the course of your work.
- Be a technological ambassador for the research center. Help build and engage with the broader academic and AI communities including the Harvard student population.
- Engage with partners to both share our work and explore new opportunities.

Qualifications

Basic Qualifications

Minimum of seven years' post-secondary education or relevant work experience

Additional Qualifications and Skills

We are looking for people who have:

- A desire to create public-interest impact on AI.
- Deep understanding and experience designing, implementing, testing, and documenting data workflows.
- Advanced working knowledge of machine learning and "AI" systems including local and open toolchains in addition to commercial offerings.
- OCR and/or computer vision experience.
- Strong grasp of at least one general purpose development technology (Python, Javascript, Lisp, ...) and of everyday development tools (IDEs, Git, dependencies management, Linux & SSH, CI/CD, ...)
- Experience drafting technical or scientific communications to document and disseminate their work.
- A track record of shipping complex projects, especially working independently or within early-stage companies and organizations.

Candidates need not have all of these qualifications to be promising, but all promising candidates will have a strong track record of shipping.

Additional Information

Travel is required for quarterly on-site meetings plus occasional travel for conferences and events as needed.

Given the multidisciplinary nature of our work, we encourage a short cover letter to explain how your career trajectory and interests align with our work and mission.

This position works a combination of on-campus and remote work based on business needs and manager approval. The opportunity for 100% remote work is available for applicants who live more than 50 miles from the Harvard Law School campus. All remote work must be performed within a state in which Harvard is registered to do business (CA, CT, GA, IL, MA, MD, ME, NH, NJ, NY, RI, VA, VT and WA). Candidates residing in other states are also encouraged to apply, though would become employees of a third-party external payroll company rather than Harvard University.

Appointment End Date: This is a two-year term appointment with potential for renewal subject to funding and departmental need.

Standard Hours/Schedule: Full-Time

Visa Sponsorship Information: Harvard University is unable to provide visa sponsorship for this position

Pre-Employment Screening: Identity, Education

Other Information:

All offers to be made by HLS Human Resources

#LI-MH1

Work Format Details

This position has been determined by school or unit leaders that the duties and responsibilities can effectively be performed fully remotely at a non-Harvard location. Employees in fully remote positions must work all scheduled hours in a Harvard registered state in compliance with the University's Policy on Employment Outside of Massachusetts. At the discretion of the department, fully remote employees may occasionally be required on site at a Harvard location. Certain visa types and funding sources may limit work location. Individuals must meet work location sponsorship requirements prior to employment.

Salary Grade and Ranges

This position is salary grade level 059. Please visit Harvard's Salary Ranges to view the corresponding salary range and related information.

Benefits

Harvard offers a comprehensive benefits package that is designed to support a healthy work-life balance and your physical, mental and financial wellbeing. Because here, you are what matters. Our benefits include, but are not limited to:

- Generous paid time off including parental leave
- Medical, dental, and vision health insurance coverage starting on day one
- Retirement plans with university contributions
- Wellbeing and mental health resources
- Support for families and caregivers
- Professional development opportunities including tuition assistance and reimbursement
- Commuter benefits, discounts and campus perks

Learn more about these and additional benefits on our Benefits & Wellbeing Page.

EEO/Non-Discrimination Commitment Statement

Harvard University is committed to equal opportunity and non-discrimination. We seek talent from all parts of society and the world, and we strive to ensure everyone at Harvard thrives. Our differences help our community advance Harvard's academic purposes.

Harvard has an equal employment opportunity policy that outlines our commitment to prohibiting discrimination on the basis of race, ethnicity, color, national origin, sex, sexual orientation, gender identity, veteran status, religion, disability, or any other characteristic protected by law or identified in the university's non-discrimination policy. Harvard's equal employment opportunity policy and non-discrimination policy help all community members participate fully in work and campus life free from harassment and discrimination.
We are an equal opportunity employer and all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, disability status, protected veteran status, or any other characteristic protected by law.
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