

JD – Post Doc Researcher

Postdoctoral Researcher – AI/ML for Healthcare Innovation

Location: India

Company: Truveta

About Truveta

Truveta is transforming healthcare by enabling researchers, clinicians, and life sciences organizations to learn from one of the most comprehensive collections of de-identified patient data in the United States. With access to longitudinal electronic health record (EHR) data from over 120 million patients (which represents over a third of the US population), we are uniquely positioned to drive breakthroughs in clinical research and improve patient outcomes.

The Role

We are seeking a highly motivated **Postdoctoral Researcher** to explore and develop novel applications of cutting-edge AI/ML technologies on large-scale real-world clinical data.

This role is designed for recent PhD graduates who are passionate about pushing the boundaries of machine learning in healthcare. You will work at the intersection of **machine learning, clinical data, and biomedical science**, identifying new opportunities where modern AI can unlock insights that were previously out of reach.

A key expectation is not just execution—but **imagination**: the ability to envision and prototype entirely new ways to use rich patient data to solve meaningful healthcare problems.

What You'll Do

- **Innovate:** Identify and propose novel, high-impact applications of AI/ML using large-scale EHR data
- **Research & Prototype:** Design, develop, and evaluate state-of-the-art models (e.g., foundation models, multimodal learning, causal ML, generative AI)
- **Work Across Modalities:** Integrate structured and unstructured EHR data with emerging data types such as genomics, imaging, and clinical notes
- **Collaborate Cross-Functionally:** Partner with clinicians, data scientists, and product teams to translate research ideas into real-world solutions

- **Publish & Share:** Contribute to top-tier conferences/journals and represent Truveta in the research community
- **Explore the Unknown:** Proactively identify problems that have not yet been addressed and define new research directions

What We're Looking For

Basic Qualifications

- PhD in Computer Science, Machine Learning, Biomedical Informatics, or a related field
- Strong background in machine learning, deep learning, or statistical modeling
- Experience applying ML to healthcare, biomedical, or clinical datasets
- Proficiency in Python and modern ML frameworks (e.g., PyTorch, TensorFlow)

Preferred Qualifications

- Experience with healthcare data (EHRs, claims, clinical notes) or biomedical data (genomics, imaging)
- Familiarity with cutting-edge areas such as:
 - Foundation models / LLMs in healthcare
 - Multimodal learning
 - Causal inference
 - Representation learning on longitudinal data
- Track record of publications in top-tier ML or healthcare venues (e.g., NeurIPS, ICML, ICLR, MLHC, AMIA)
- Ability to work across disciplines and communicate with both technical and clinical stakeholders

Who You Are

- **Curious and imaginative:** You naturally think beyond existing solutions and ask “what hasn’t been done yet?”
- **Impact-driven:** You care about applying research to real-world healthcare problems
- **Comfortable with ambiguity:** You thrive in open-ended environments where defining the problem is part of the job
- **Collaborative:** You enjoy working across domains and learning from experts in different fields

Why This Role is Unique

- Access to one of the largest and richest longitudinal EHR datasets in the US
- Opportunity to work on **previously infeasible problems** at the intersection of AI and medicine

- A balance of **academic-style research freedom** and **real-world impact**
- Collaboration with leading healthcare systems and industry partners

Example Problem Areas (Illustrative)

- Learning patient trajectories using foundation models for clinical decision support
- Discovering novel phenotypes or disease subtypes from multimodal data
- Predicting treatment effectiveness using causal ML on real-world data
- Generating synthetic cohorts for rare disease research
- Integrating genomics + EHR for precision medicine applications