Tenure-Track Faculty Positions - Machine Learning and Data Science

The Duke University Department of Biostatistics and Bioinformatics invites applications for multiple tenure-track faculty positions in all aspects of machine learning and data science at all levels. Successful candidates will have a strong interest in motivating their theoretical and/or algorithmic research by real needs in health, broadly-defined. Examples include learning causal models or predictive models from electronic health records or genomic, epigenetic, immunologic, or microbiome data, predictive models for cancer precision medicine, natural language processing for health applications, deep learning or probabilistic graphical models for mHealth applications or medical image processing, privacy-preserving machine learning for health monitoring and prediction, novel algorithms for reinforcement learning or contextual bandits for complex clinical trials, and novel optimization objective functions for machine learning motivated by the needs of health applications. These examples are not meant to imply a limit on our scope of interest but to illustrate its breadth.

Applicants should hold a Ph.D. in Computer Science, Computer Engineering, Statistics, Biomedical Informatics, Bioinformatics, or a related field by the date of the start of their appointment. Joint appointments with other departments are possible for appropriate candidates. Particular attractions of this position include the exceptional data and translational opportunities of Duke Health and the School of Medicine, the campus-wide emphasis on artificial intelligence for health as exemplified by the new AI Health Initiative, and the opportunity for a one-course-per-year teaching load for candidates who want to focus their efforts on algorithmic, theoretical, and/or methodological research with the potential to transform health and healthcare nationwide and around the world.

The Department of Biostatistics and Bioinformatics has Masters and PhD programs, and our algorithmic-oriented faculty also supervise PhD students in other leading programs on campus. Duke has an exceptional history in healthcare innovation, and Durham and the Research Triangle form a vibrant community with an outstanding climate intellectually, culturally, and for year-round physical activity and recreation.

Application review will begin January 1, 2020 and continue until all positions are filled. Applicants are invited to submit application materials via Academic Jobs Online at https://academicjobsonline.org/ajo/jobs/15260. Please upload a CV, research statement, and teaching statement, and request at least three references to upload letters of recommendation.

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