

Anna Shcherbina

Anna is a graduate student in the Biomedical Informatics PhD Program at Stanford University. She is interested in developing algorithms that utilize machine learning and data mining approaches to derive medically relevant conclusions from multi-layer omics data. Anna attended the Massachusetts Institute of Technology, where she double majored in Computer Science and Biological Engineering. After graduation she pursued an M.Eng. degree at MIT Lincoln Laboratory in the Bioengineering Systems and Technologies group, where she continued to work until beginning her PhD at Stanford. During this time she developed algorithms to characterize microbiome metagenomic datasets, to predict kinship and biological ancestry from variant data, and to characterize different stages of healing from musculoskeletal injury. Currently, Anna is developing deep learning algorithms for identifying pathogenic variants in undiagnosed diseases. She is also mining “big data” sources such as the UK Biobank and the MyHeart Counts mobile health data for meaningful associations between physical activity and health. Anna's long term goal is to contribute to precision medicine by integrating physical activity, medical history, and genetic information to build a more complete picture of patient health.