

David Chambers, BS, MS Principal Engineer, Perception Systems

Growing Collaboration for Artificial Intelligence/Machine Learning Resources to Advance Clinical Informatics/Clinical Analytics Training

David Chambers (B.S., M.S., Mechanical Engineering, University of Oklahoma) is a Principal Engineer and Al researcher. In his current role at Southwest Research Institute (www.swri.org), he develops solutions for a wide array of government and commercial clients, developing custom computer vision algorithms for autonomous vehicles, advanced driver assistance systems, manufacturing automation, medical imaging, and markerless motion capture. David has a passion for designing machinelearning solutions that integrate physical and geometric constraints to improve and regularize behavior. As part of Southwest Research Institute's Human Performance Initiative, he developed and evaluated the neural network and associated tools for predicting human pose from a multi-camera system. Working with a team of Al researchers and pathologists at the University of Texas at San Antonio Health Science Center (UTHSCSA), he developed a custom neural network for predicting cancer cellularity from Whole Slide Imaging (WSI) for breast cancer, creating an entry to the BreastPathQ medical imaging challenge which won first place in the international competition. Mr. Chambers continues this research as an appointed adjunct specialist at UTHSCSA.