

Beyond the Surface: 3D and 4D Imaging for Craniofacial Assessment and Treatment

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Abstract

Dr. Hallac is an imaging scientist at Children's Health and an associate professor at UT Southwestern Medical Center. Utilizing 3D imaging, modelling and printing, Dr. Hallac has sought to improve pediatric surgery, providing tangible, patient-specific solutions tailored to surgical planning. His expertise in 3D imaging and modelling has enabled objective assessments of deformities and post-operative results. Furthermore, he has developed machine learning algorithms that have met or exceeded conventional diagnostic standards.

With a focus on patient safety, Dr. Hallac has innovated imaging protocols to minimize radiation during craniofacial assessments. His published contributions highlight his dedication to integrating technology and medicine.