PROJECT OVERVIEW: Spatial Dissection (EXP-001) Subject: 3D MRI/CT Anomaly Detection

Objective: To eliminate human error and fatigue in radiological diagnostics by constructing an automated, in-browser spatial dissection tool.

Methodology: We trained a 3D U-Net architecture on open-source medical imaging datasets (e.g., BraTS). The model processes volumetric data to segment micro-lesions and tumours. The output is fed into a Three.js WebGL environment, allowing the user to visually "explode" the skull or chest cavity, isolating the anomalous tissue in real-time.

Current Status: Model inference is stable. Rendering is smooth. The algorithm currently highlights suspicious masses in a pulsating red hue.

Lab Notes: *The machine sees what the tired human eye misses. The exploded skull view is highly informative, though it tends to unsettle the faint of heart. Note to self: do not show the rendering to the subjects before the actual surgery.*