Monocular multi-person 3D mesh recovery in real time (ROMP[ICCV21])

ROMP (Regress all meshes in a One-stage fashion for Multiple 3D People) aims to figure out the 3D shapes of people's bodies from just one picture. Most methods that exist now have a bunch of steps, like finding boxes around people and then figuring out their shapes separately. **ROMP** makes it simpler by doing everything in just one step. Their method consists of predicting both where the body's center is and what the body's shape is like. This approach eliminates the need for complex multi-stage procedures and enhances robustness to occlusions **(Cf. https://github.com/Arthur151/ROMP).**

Hiba Elfarchioui **the "African Queen of Mathematics" in the 30th edition of the African Mathematics Olympiad**

Use of deep learning and physics to fix motion corrupted MRI scans (MIT)

Researchers at MIT have developed a deep learning model to address the challenges of ***motion artifacts in brain MRI scans.*** Unlike X-rays or CT scans, MRI provides high-quality soft tissue contrast but is sensitive to even small movements, leading to image artifacts that can affect diagnoses and treatment. The paper, titled ***Data Consistent Deep Rigid MRI Motion Correction***, combines physics-based modeling and deep learning to generate motion-free images from corrupted data without altering the scanning process. The method aims to ensure consistency between image output and actual measurements to avoid creating inaccurate "hallucinations." ***(Cf.github.com/nalinimsingh/neuroMoCo)***

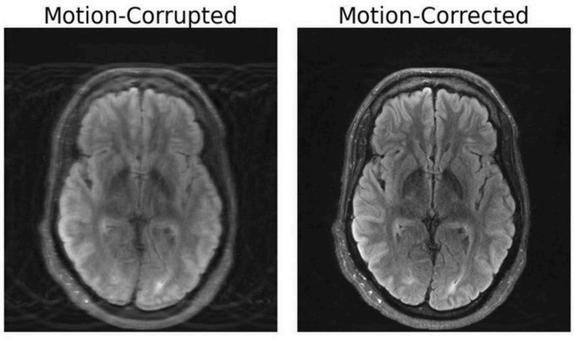

Image source: **news.mit.edu/2023**

D2L.ai: Interactive Deep Learning Book with Multi-Framework Code, Math, and Discussions

Dive into Deep Learning is an open-source book that is drafted in Jupyter notebooks, integrating exposition figures, math, and interactive examples with self-contained code.

Midjourney 5.2 release

Midjourney has released version **5.2** with exciting updates. The new release enhances image quality, coherence, and diversity. The **'Zoom Out'** function expands images while preserving details, and the **'Make Square'** tool adapts non-square images. The **'Variation Mode'** offers nuanced outputs, and the enhanced **'Stylize'** command ranges from hyper-realistic to abstract. The **'shorten'** command refines prompts. This version empowers users to create captivating images aligned with their vision, making it a leap forward in AI-driven creativity.