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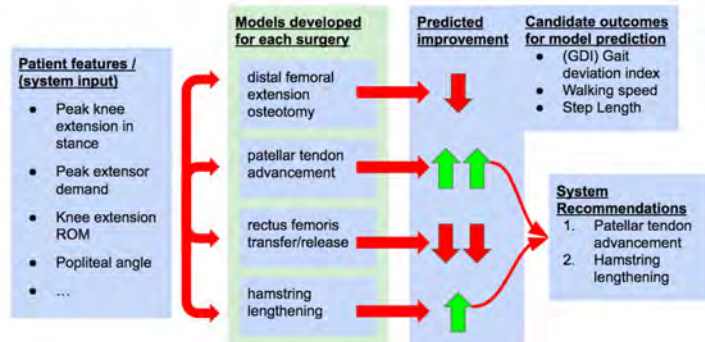
Research Group: 8 PhD, 5 MS, 13 BS (capstone students), 14 TAMS

Biomed-AI.com



Integrated Deep Learning, Software Deployment, and Validation for Medical Outcomes Assessment

Data-driven Clinical Outcomes Prediction



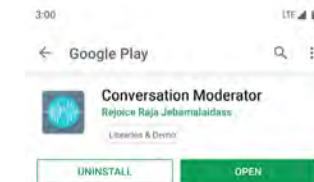
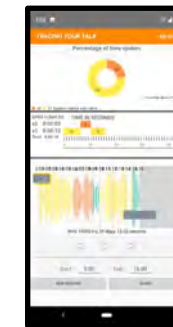
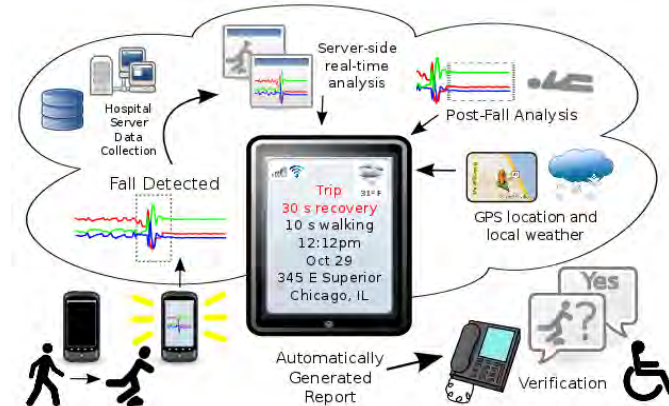
- Deep learning and traditional machine learning to measure, succinctly summarize, and predict clinical outcomes
- End-to-end development and deployment through integrated teams
- Unsupervised ML relations to sensory computational neuroscience explored
- Emphasis on validation strategies for robust, real-world clinical application

Autoencoders for summarizing high-dimensional sensor-based metrics and outcome measures



Single metric represented overall functional ability 50% better than competing outcome measures

Real-time fall detection and response



Released app for assessment of speech, tailoring for aphasia

Treatment scoring and suggestion, Shriners surgery prediction system



Systems and Methods for a Rehabilitation Dashboard (US Patent App. 14/468,051)

