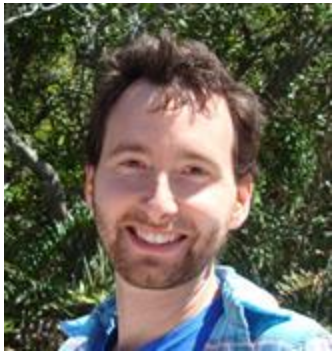

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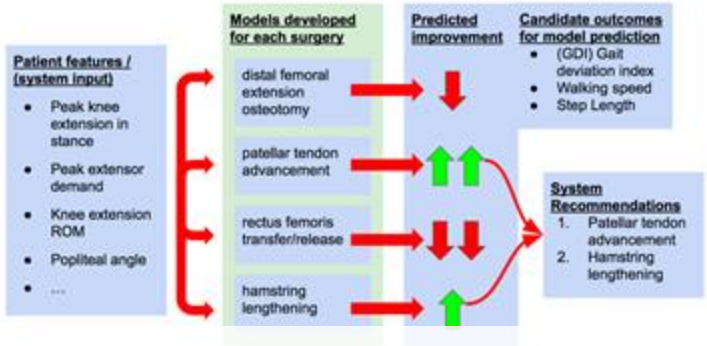
Biomed-AI.com

Shirley Ryan Abilitylab | The future of RIC | NIH National Institutes of Health | Shriners Hospitals for Children

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

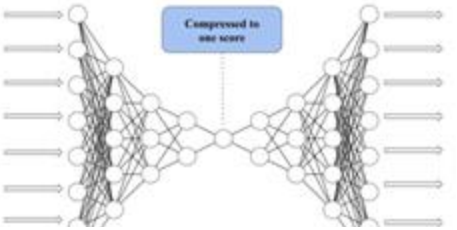
Data-driven Clinical Outcomes Prediction



Treatment scoring and suggestion, Shriners surgery prediction system

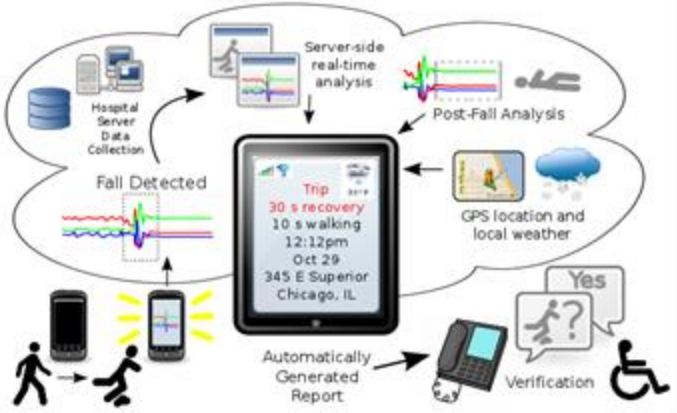
- **Deep learning and traditional machine learning to measure, succinctly summarize, and predict clinical outcomes**
- **End-to-end development and deployment through integrated teams**
- **Unsupervised ML relations to sensory computational neuroscience explored**
- **Emphasis on validation strategies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

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

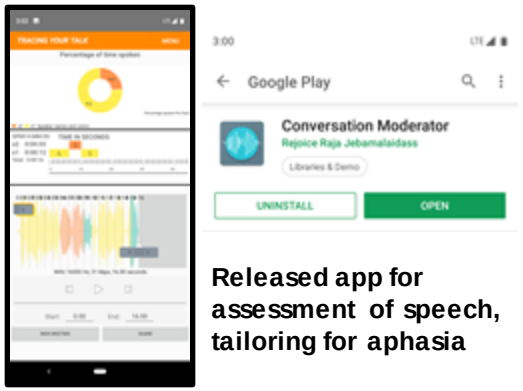


Single metric represented overall functional ability 50% better than competing outcome measures

Real-time fall detection and response



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



Released app for assessment of speech, tailoring for aphasia