

FACULTY MENTOR

Eric Granholm

PROJECT TITLE

Automated Therapy Fidelity

PROJECT DESCRIPTION

Automated speech processing and natural language processing will be used to automate fidelity ratings (the quality of the therapist's delivery of the intervention) based on audio recordings (N > 600) of psychotherapy sessions.

INTERNS NEEDED

2 any level

PREREQUISITES

ASR or NLP knowledge

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PROJECT TITLE

Pupillometry using RGB Cameras

PROJECT DESCRIPTION

Pupillometry can be used to quantify the amount of cognitive effort used to perform a task (greater pupil dilation indicates greater effort). Smartphone and webcams can be used to detect the pupil and quantify changes in diameter which can be used in a number of applications (e.g., early identification of risk for Alzheimer's disease; motivation and effort measurement in depression or schizophrenia).

INTERNS NEEDED

2 any level

PREREQUISITES

Computer vision/digital image capture knowledge