Facial Liveness Tests

Creator	Ryan Collins
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TASK TITLE	Durham Week	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
Dataset Integration																													
NUAA dataset integration	2																												
REPLAY-ATTACK dataset integration	2																												
Test Framework																													
Generic Model Implementation	1																												
Dataset Manager (for test data) using datasets above	1																												
Test Runner	2																												
Quality Liveness Test																													
ReferenceImage creator (Gaussian subtraction)	1																												
Implementation of simple metrics (1-19)	3																												
Implementation of specialised metrics (20 onwards)	3																												
Vector consolodation (providing the vector from the metrics)	1																												
Linear classifier layer	3																												
Eye Tracking Liveness Test																													
Eye Detection	1																												
Face Region Normalization	2																												
Eye region binarization	1																												
Variation calculator	1																												
Variation classifier	1																												
CNN Liveness Test																													
Facial localization	2																												
Spatial augmentation	2																												
Temporal augmentation	2																												
Convolutional Neural Network (ImageNet)	2																												
Consolodation Layer																													
Vector creator based on the output of other tests	1																												
Training a classifier to give an output based on input	1																												
Comparison Data Gathering																													
Comparison of each three models individually	1																												
Models seperately, or models with the consolodation layer	1																												
Face Flashing Liveness Test																													
Generation of parameters	1																												
Initialization of front end	1																												
Presentation of challenge	1																												
Response collection	2																												
Repetition of response	1																												
Timing Verification	3																												
Face verification	3																												
Expression verification	2																												