

GATE-EIS: EEG indicators of Stress

Tobias Heffelaar
Date: 16 February 2012

- Developer of professional software, hardware and integrated solutions for behavior research
- Founded in November 1989 by Lucas Noldus
- 123 employees worldwide
- Headquarters in Wageningen, The Netherlands
- Offices in France, Germany, Spain, Hungary, USA, China
- > 5.900 customers in 85 countries



Product development

- Software applications
- Hardware instruments and devices

System integration

- Noldus software and hardware
- Computer hardware
- Video and multimedia components
- Eye tracking and DAQ systems
- Integrated behavior research labs

Services

- Training
- Consulting
- *Measuring Behavior* conferences



Technologies

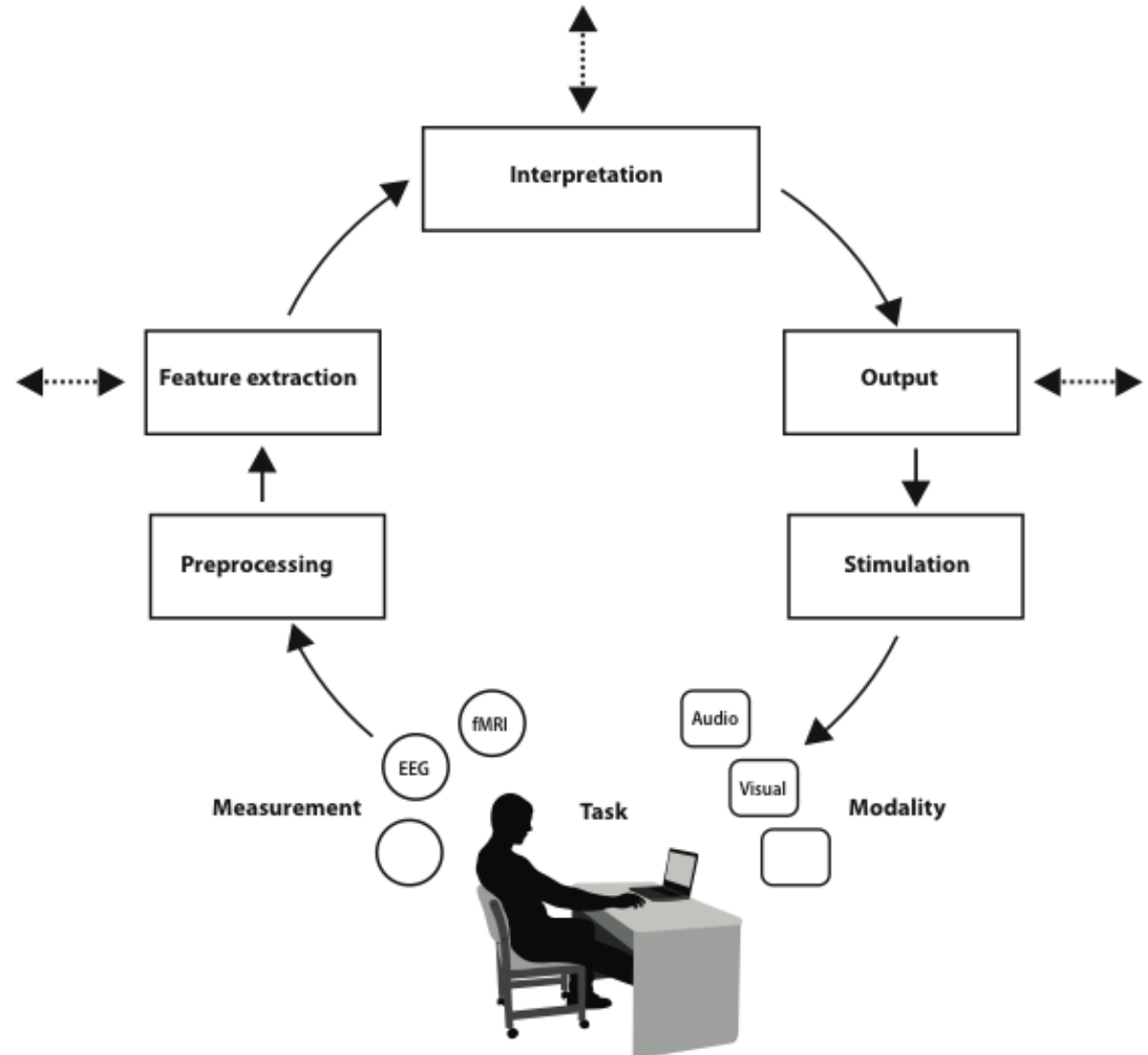
- Activity monitoring
- Emotion measurement
- Pattern classification
- Reasoning
- Feedback

Projects

- GATE
- COMMIT (SWELL)
- PATRIA2

Partners

- Noldus IT
- VicarVision
- Philips
- TNO
- Ericsson
- UT



Testing of:

- Accessibility
- Functionality
- Usability
- Emotional experiences



IBBT, Ghent, Belgium



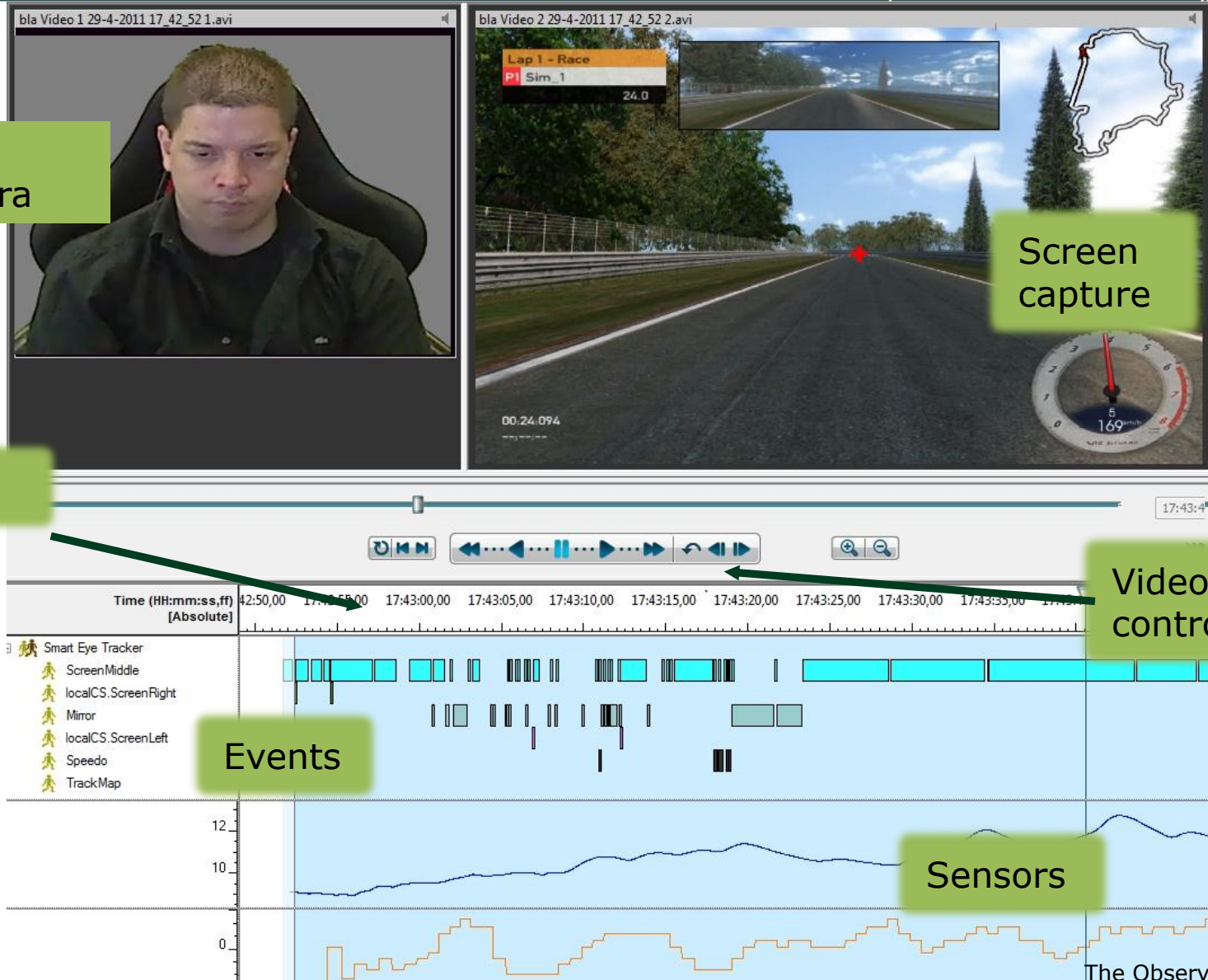
Glasgow Caledonian University

Testing of:

- Information systems
- Interactive displays
- Personalized ambient lighting



- Future part of Integrated behavioral research in research labs
- Workload is a commonly used parameter in many experiments
- Researchers (our customers) experience more and more pressure to quickly deliver
→ need for real-time and automation of data collection



User Camera

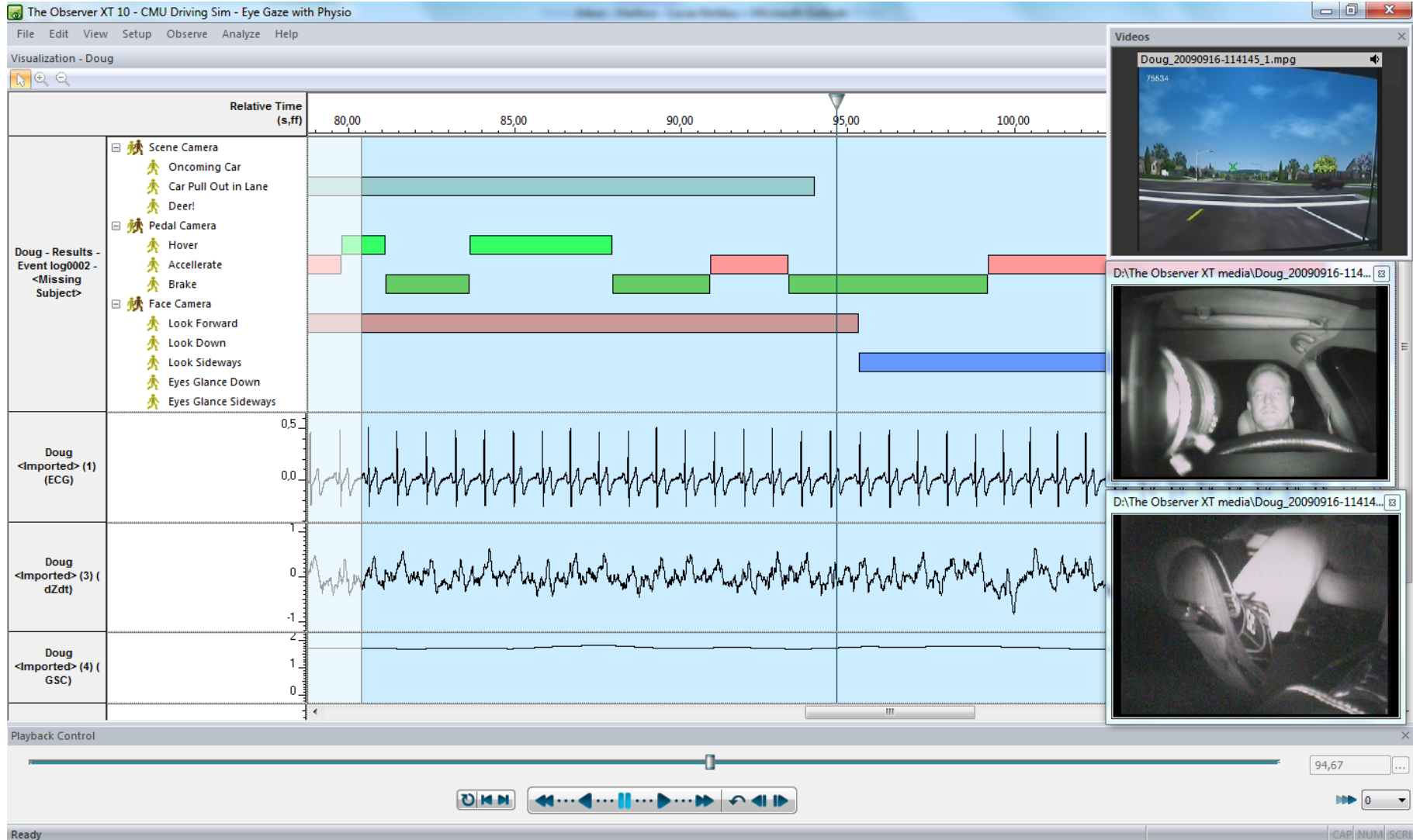
Screen capture

Timeline

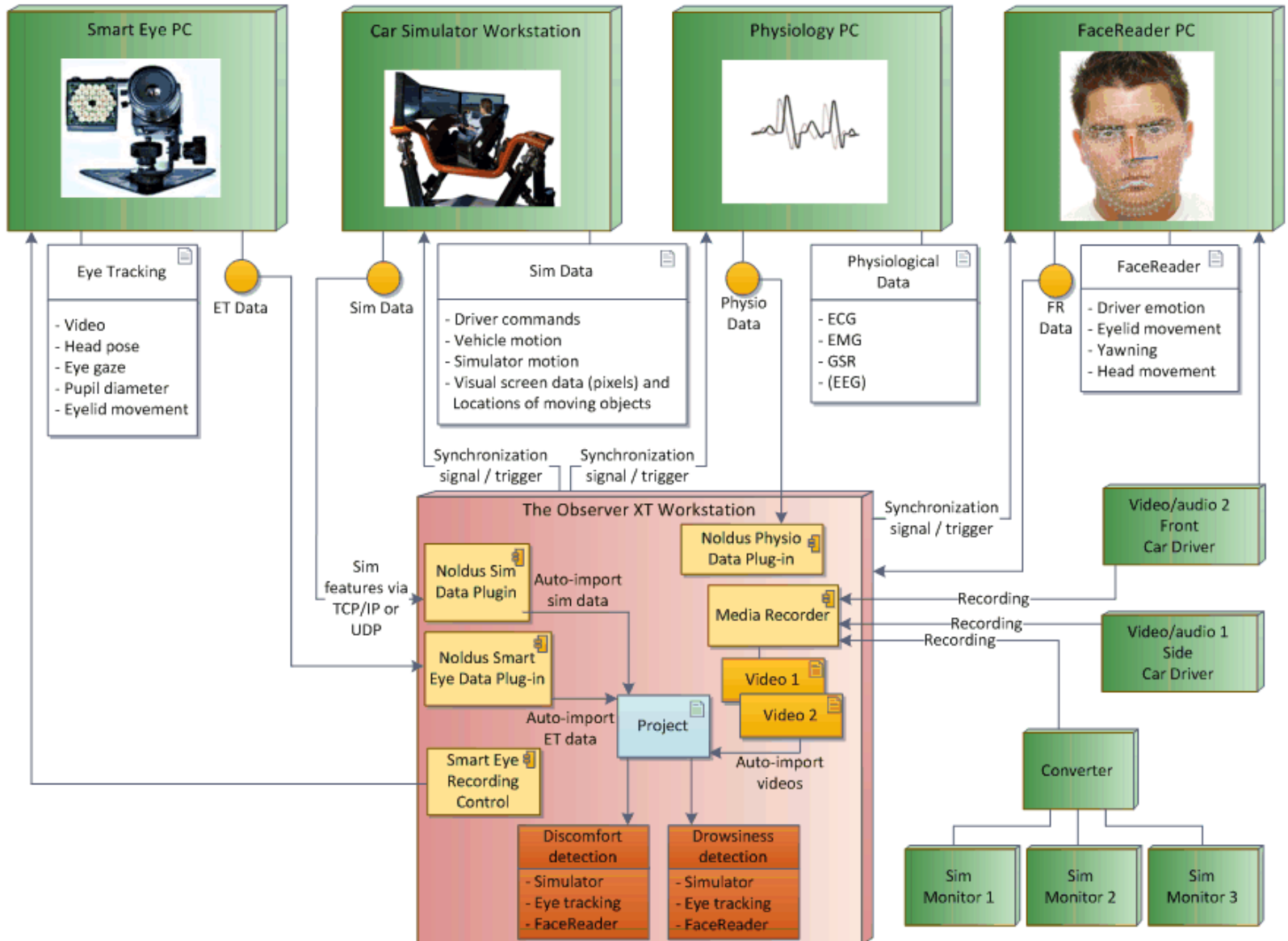
Video control

Events

Sensors



Multimodal driver observation system



- Continued cooperation with TNO in ADVICE, plans are crafted for more cooperation
- The estimator will be presented at Measuring Behavior B2012
- Validation of the estimator in various experimental conditions,
Such as DRIVOBS

