



Summer school on Probabilistic Morphable Models

Basel, 03. June – 07. June

Probabilistic shape modelling

Marcel Lüthi

Graphics and Vision Research Group
Department of Mathematics and Computer Science
University of Basel

Probabilistic Morphable Models

Online Course / Futurelearn



Shape Modelling

Summer school



Model fitting

Scalismo

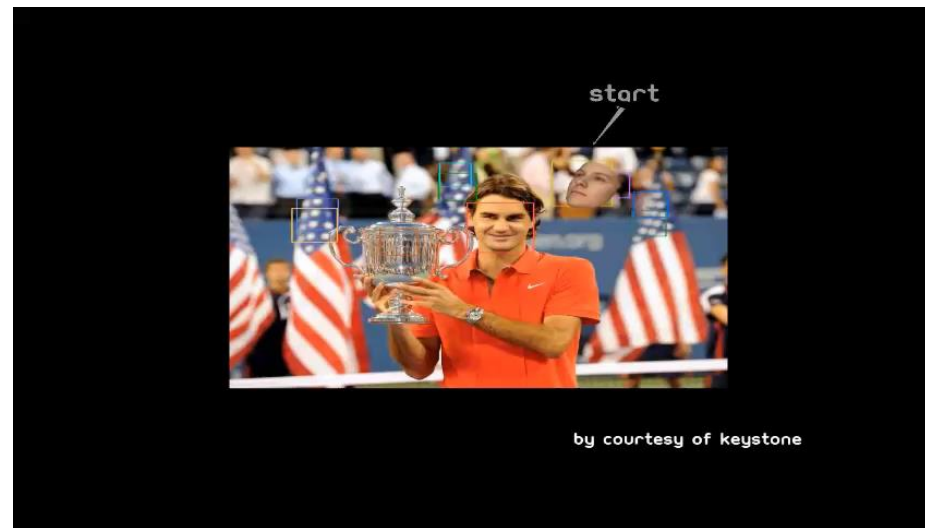
Probabilistic Morphable Models

Online Course / Futurelearn



Shape Modelling

Summer school



Model fitting

Scalismo

Goal

All participants feel confident to approach complicated real-world problems.

At the end of this week you should have:

- a good understanding of the conceptual approach
 - knowing how to approach a problem
 - knowing its strength and limitation
- implemented the concepts in at least 2 practical use cases
- good mastery of the tools (Scala / Scalismo)

Programme

	Morning (09:00 – 12:00)	Afternoon (13:30 – 17:00)
Monday	<ul style="list-style-type: none">• Analysis by Synthesis• Non-rigid registration• Introducing the course project	<ul style="list-style-type: none">• Scala – Part 1• Course project• Spotlight presentations
Tuesday	<ul style="list-style-type: none">• Bayesian inference• Probabilistic model fitting	<ul style="list-style-type: none">• Scala – Part 2• Course project
Wednesday	<ul style="list-style-type: none">• Analysis of 2D face images using• Course project	<ul style="list-style-type: none">• Course project
Thursday	<ul style="list-style-type: none">• Understanding MCMC	<ul style="list-style-type: none">• Face image analysis – a look back• Course project
Friday	<ul style="list-style-type: none">• Selected Advanced topics	<ul style="list-style-type: none">• Social event

Today's Schedule

Time	Topic
09:15	Theory: Analysis by Synthesis
09:45	Theory: Case study – non-rigid registration
11:00	Introducing the course project
11:30	Setting up the environment – Course project, Part 1
13:30	Theory: Scala – Part 1
14:30	Course project, Part 1
15:30	Spotlight presentations
17:00	Welcome reception