



New techniques for assessing the visual condition of civil engineering structures

Stuart McRobbie, 11th November 2009



PhD details

- University of Birmingham
 - School of Civil Engineering
- Supervised by Professor Chris Page
 - Dr Yingang Du – now at Steel Construction Institute
- TRL supervisor Dr Alex Wright
- Started in March 2008
 - Just completed '1st year' review process
 - Hope to submit thesis in September 2012
- Major challenges
 - Improve image processing
 - LIDAR data collection, processing and integration



What the PhD is about

- Investigating techniques for automating, or semi-automating, aspects of the bridge inspection process
- Concentrating on relatively simple concrete structures
 - Data collection
 - Data processing
 - Data fusion
 - Data analysis
 - Data visualisation

What the PhD is NOT about*

- Producing a working commercial system
- Treatment selection rules
- Deterioration mechanisms of materials
- Interventionary maintenance of structures
- Bridge design

* *Not an exhaustive list: for example PhD is also not about star formation, gravitational lensing, dinosaurs, ants, Australian history, flower genetics...*