

List of Publications

Within this project, the following papers have been published

Journal Paper I

A. Sjölander, V. Belloni, A. Ansell and E. Nordström. Towards automated inspections of tunnels: A review on optical inspections and autonomous assessment of concrete tunnel linings. *Sensors*, 23, 3189, 2023.

Journal Paper II

V. Belloni, A. Sjölander, R. Ravanelli, M. Crespi, A. Nascetti. Deformation from Motion (DfM): a novel approach for in-plane crack detection and measurement using cameras with not fixed positions. *Submitted to: Automation in Construction*, vol, pp xx-yy, xxxx.

Journal Paper III

A. Sjölander, J. Ledin, J. Enzell. Structural assessment of cracked fibre-reinforced shotcrete tunnel linings: The impact of horizontal confinement and rock bolts. *to be Submitted to: Engineering Failure Analysis*, vol, pp xx-yy, xxxx.

Journal Paper IV

A. Sjölander, V. Belloni, V. Peterson, J. Ledin. Experimental dataset to assess the structural performance of cracked reinforced concrete using Digital Image Correlation with fixed and moving cameras. *to be Submitted to: Data in Brief*, vol, pp xx-yy, xxxx.

Journal Paper V

A. Sjölander, R. Fekadu, V. Belloni, A. Nascetti. Cracks in concrete tunnel linings: A dataset of labelled cracks in concrete rock support for training of deep-learning algorithms. *to be Submitted to: Data in Brief*, vol, pp xx-yy, xxxx.

Conference Paper I

V. Belloni, A. Sjölander, R. Ravanelli, M. Crespi, A. Nascetti. TACK project: tunnel and bridge automatic crack monitoring using deep learning and photogrammetry, *in proceeding of: The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, vol XLIII-B4-2020, pp 741–745, 2020.

Conference Paper II

A. Sjölander, V. Belloni, R. Ravanelli, K. Gao, A. Nascetti. TACK – an autonomous inspection system for tunnels. *in proceedings of: World Tunnel Congress*, Copenhagen, Denmark, 2022.

Dataset I

A. Sjölander, V. Belloni, A. Nascetti. Dataset to track concrete cracking using DIC with fixed and moving camera. *Mendeley Data*, V1, 2022.

Dataset II

A. Sjölander, V. Belloni, V. Peterson, J. Leding. Dataset to assess the structural performance of cracked reinforced concrete using FEM, DIC and DfM. *Mendeley Data*, V1, 2022.

Dataset III

A. Sjölander, R. Fekadu, V. Belloni, A. Nascetti. TACK -Semantic Segmentation of Cracks in the concrete lining in Tunnels. *Mendeley Data*, V1, 2023.