Record Nr. UNINA9910346956903321 Autore Stein Denis Titolo Mobile laser scanning based determination of railway network topology and branching direction on turnouts Pubbl/distr/stampa KIT Scientific Publishing, 2018 1000077900 **ISBN** Descrizione fisica 1 electronic resource (XII, 137 p. p.) Collana Schriftenreihe / Institut für Mess- und Regelungstechnik, Karlsruher Institut für Technologie Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia GNSS is often inaccurate and satellite signals are not always available, Sommario/riassunto which results in ambiguous situations. In order to reduce their negative effects on train-borne localization, this work proposes an approach for the detection of tracks, turnouts, and branching directions solely from 2d lidar sensor measurements. The experimental evaluation shows highly correct and complete results. In summary, these detections are sufficient to reduce ambiguity problems in train-borne localization.