

STELLENAUSSCHREIBUNG

Bachelorarbeit, Masterarbeit, Studentische Abschlussarbeit

EVALUATION OF HYPOTHESES USING GRAPH CONVOLUTIONAL NETWORKS FOR SCENE SIMILARITIES

UMFELD

Most of the scenarios, be it expected or unexpected, be it highways or an intersection, we humans can identify possible situations which could unroll in the future depending upon the knowledge which we have acquired in the past. Translating this same knowledge to machines via Neural Networks still remains a challenging task.

AUFGABEN

The main aim of this thesis is to evaluate state-of-the-art approaches through thorough paper research; to identify similarities between frequently occurring scenes or scenarios. The expected results of this thesis should provide us with a concrete evaluation metrics and methodologies to identify recurrently similar visual or geometric patterns from the meta data available.

- Thorough analysis on the research papers; focused specifically towards Vehicle-Vehicle interaction with algorithms related to Graph CNN's.
- Convert theoretical research into applied research towards the field of Autonomous Vehicles (AV).

WIR BIETEN

- An interdisciplinary working environment with partners from science and core industries revolving around AV Technologies
- An economic/industrial work environment and organization
- A pleasant working atmosphere and constructive cooperation.

WIR ERWARTEN

- Good programming skills in Python
- Good Theoretical knowledge in the field of machine learning or Deep learning
- Good understanding of Convolutional Neural Networks and Graph Convolutional Networks
- Ability to grasp research concepts at faster pace
- Any previous knowledge of ML frameworks such as Tensorflow, PyTorch is a plus
- Very good German or English language skills.

BEWERBUNG

We're looking forward to receiving your PDF application to the mail vivekana@fzi.de, with the following documents:

- Current excerpt of grade sheet/leistungsübersicht
- Updated curriculum vitae
- Themen-Schwerpunkt: Maschinelles Lernen, Mobilität, Sichere und intelligente Fahrzeuge
- Studiengänge: Elektrotechnik, Informatik, Informationstechnik, Verwandte Studiengänge
- Kontakt: **M.Sc. Abhishek Vivekanandan**, vivekanandan@fzi.de, Tel.: +49 721 9654-354