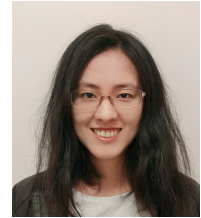


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Research Aims

- My research focuses on robust deep learning model and its applications on various safety-critical systems.
- Despite the wide use and huge success of deep learning in recent year, deep learning models are demonstrated to be vulnerable and not robust to environmental uncertainty and adversarial-perturbed noisy data. The primary goal of my research will be developing robust deep learning models including convolutional and recurrent neural networks, so that the trained deep learning models are robust and remain highly accurate under any environmental uncertainty such as adversarial perturbation, data missing, and data pollution.
- We envision that any systems with deep learning components will benefit from this research, especially those safety-critical missions operated by semi- or fully-autonomous systems, such as self-driving cars, automated rescuing robots, automated medical analysis/diagnosis.
- This research will also enable the deep learning models, beyond the computer science community, to be applicable on a wider range of applications, such as various prediction, classification and regression problems in industrial systems where the data is usually noisy, polluted or/and missing. At the final stage of this research, besides the theoretical and algorithmic contribution on robust deep learning, several case studies from autonomous systems and industrial systems will be explored and presented.





Education

- 2019 – ■ **PhD Student, Lancaster University** Computer Science
Research: *Robust Deep Learning and Its Applications on Safety-critical Systems*
- 2012 – 2019 ■ **Diplom(Master), Technical University of Dresden** Mechatronics Engineering
Final Year Thesis in Institute of Fluid Technology: *Topology Optimization of an Electromagnetic Valve Actuator with Level-Set and Adjoint Variable Method* (grade 1.4, very good)
Thesis in Institute of Fluid Technology, TU Dresden: *Implementation of Level-Set-Method for the Script-controlled Topology Optimization of Electromagnet* (grade 1.7, good)
Project in electronic Institute, TU Dresden: *an Electrodynamical Paradox*
Focus: *Control Engineering, Railway Technology, Electrical Machines, Power Electronics* (grade 1.7, good)
- 2011 – 2012 ■ **Tudias Language Institute** Learning German
- 2009 – 2010 ■ **Czech Technical University in Prague** Exchange Student
- 2007 – 2011 ■ **B.A., Zhejiang University** Mechatronics Engineering (GPA 3.82/4.0)
Thesis title: *Simulation Analysis and Experimental Research on Flexible Double-fin Propulsion System*



Awards

- 09/2010  The Third-prize Scholarship of Zhejiang University
- 04/2010  Excellent Project in Student Research Training Program
- 02/2010  Scholarship for Exchange Students
- 09/2009  The Third-prize Scholarship of Zhejiang University
- 09/2008  The Third-prize Scholarship of Zhejiang University

Experience

- 2016  **Internship as Testing Engineer** TP-Link Deutschland GmbH in Frankfurt, Germany
Duties involved:
Project Work of Power Line communication
Updating the Firmware/Software
Testing Communication Devices
- 09/2016  **Interpreter** Fair InnoTrans in Berlin
- 04/2014  **Interpreter** Hannover Messe
- 07/2010  Internship at Baosteel Group in Shanghai

Skills

- Languages  English: Fluent (IELTS 7.5)
German: Fluent (Testdaf 16)
Chinese: First Language
- Software & Coding  Advanced: Matlab, Simulink, Femm, Plecs
Good: C language, Comsol, Simpack, Auto CAD, Ansys, Python, Latex
Basic: IxChariot, Solidworks

References

Available on Request