Personal Information

Name: **Zhenkai Shou**

Nationality: Chinese

Living in: Stuttgart, Germany

Telephone: 0157 55826217

Email: tomshou423@hotmail.com

Website: https://zhenkaishou.github.io/my-site/

Education

- **University of Stuttgart**   Stuttgart, Germany
  Master degree, INFOTECH   2015 - 2018
- **Fachhochschule Lübeck**   Lübeck, Germany
  Bachelor degree, Information Technology   2014 - 2015
- **East China University of Science and Technology**   Shanghai, China
  Bachelor degree, Electrical Engineering and Automation   2011 - 2014

Skills

- **Languages**

  Chinese (Native), English (Fluent)

- **Programming skills**

  Python (with TensorFlow framework), Java

Thesis

- **Master Thesis**   Stuttgart, Germany
  Learning to Plan in Large Domains with Deep Neural Networks   Aug 2017 - May 2018
  - Keywords: Reinforcement Learning, Planning, Neural Network, Large Domains
  - Investigate how to fuse future information into the neural network to help improve the its performance.
  - Based on AlphaGo Zero and Imagination-Augmented Agents paper.
  - Modify the neural network in AlphaGo Zero so that it can learn from both the current state and future states.
  - Modified model achieves much lower training loss.

Personal Projects

- **Standalone Implementations**
  Implementations of simple models / algorithms which can be used somewhere else
  - Neural Machine Translation (NMT) based on TensorFlow tutorial
  - Mixture Density Network (MDN) on 2-D toy dataset
  - Residual Network (ResNet) on CIFAR-10 dataset
  - Variational AutoEncoder (VAE) on MNIST dataset

- **Paper implementations**
  Implementations of paper algorithms

- Deep Q-Network (DQN)
- Large-Scale Study of Curiosity-Driven Learning
- Prioritized Experience Replay (PER)
- World Models