

# Zhiliang Wu

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**Citizenship:** China

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## Research interests

Machine learning, esp. representation learning, Gaussian processes  
Uncertainty-aware clinical decision support

## Education

**Ludwig Maximilian University of Munich** Munich, Germany  
Ph.D. in Machine Learning Nov. 2018 – Mar. 2022  
Supervisor: Prof. Dr. Volker Tresp *GPA: magna cum laude*

**Technical University of Munich** Munich, Germany  
M.Sc. in Automation and Robotics Oct. 2015 – Oct. 2018  
Supervisor: PD. Dr. Martin Kleinsteuber *GPA: 1.1*

**Tongji University** Shanghai, China  
B.Sc. in Automation *GPA: 1.4* Sep. 2011 – Jun. 2015

## Honors and scholarships

Best Paper Award (IEEE ICHI) 2020  
Graduation with high distinction (Technical University of Munich) 2018  
Scholarship for International Students (Technical University of Munich) 2016  
The Outstanding Graduate (Tongji University) 2015

## Publications

### **Uncertainty-Aware Time-to-Event Prediction using Deep Kernel Accelerated Failure Time Models**

Zhiliang Wu, Yinchong Yang, Peter Fasching, Volker Tresp.  
*Machine Learning for Healthcare Conference & PMLR, 2021.*

### **Quantifying Predictive Uncertainty in Medical Image Analysis with Deep Kernel Learning**

Zhiliang Wu, Yinchong Yang, Jindong Gu, Volker Tresp.  
*IEEE International Conference on Healthcare Informatics (ICHI), 2021.*

### **Learning Individualized Treatment Rules with Estimated Translated Inverse Propensity Score**

Zhiliang Wu, Yinchong Yang, Yunpu Ma, Yushan Liu, Rui Zhao, Michael Moor, Volker Tresp.  
*IEEE International Conference on Healthcare Informatics (ICHI), 2020.*

### **Introspective Learning by Distilling Knowledge from Online Self-explanation**

Jindong Gu, Zhiliang Wu, Volker Tresp.  
*Proceedings of the Asian Conference on Computer Vision (ACCV), 2020.*

## **Categorical EHR Imputation with Generative Adversarial Nets**

Yinchong Yang, Zhiliang Wu, Volker Tresp, Peter Fasching.

*IEEE International Conference on Healthcare Informatics (ICHI), 2019.*

### Research experience

#### **Maschinelles Lernen mit Wissensgraphen (MLwin)**

Supervisor: Prof. Dr. Volker Tresp (LMU Munich) Nov. 2018 – Jan. 2022

Research of state-of-the-art representation learning for uncertainty-aware clinical decision support.

Collaboration with clinical experts from Uni-Klinikum Erlangen.

Publication of high-quality conference papers.

#### **Integrating Uncertainty of Implicit Feedback in Recommender Systems**

Supervisor: PD. Dr. Martin Kleinsteuber (TU Munich) Oct. 2017 – Mar. 2018

Research of the state-of-the-art Recommender systems.

PoC of internal recommender systems with the analytics team.

Completion of the master's thesis.

### Teaching experience

#### **Student assistant, Institute for Cognitive System** Summer 2017

EI7478: Practical Course Humanoid RoboCup

Preparation of the tutorial for NAO Programming.

Projects coordination on LRZ-Gitlab.

#### **Student assistant, Chair of Automatic Control Engineering** Summer 2016

EI7303: Advanced Control and Robotics Lab

Kuka-Robot Programming.

Sequential movement definition and position online teaching.

### Industry experience

**Siemens AG**, CT RDA BAM MIC-DE Munich, Germany

Working student Summer 2018

API-Gateway Project: Online hosting ML algorithms with OpenAPI Specification and Web services.

Coding for automatic testing, continuous integration and Docker containers.

### Skills

#### **Programming**

Proficient in: Python (PyTorch, Tensorflow, etc.).

Familiar with: Matlab, C++.

#### **Languages**

Chinese (native), English (fluent), German (advanced)

### Memberships

**Siemens Mentoring Program** Sep. 2017 – Sep. 2018

Regular meetings with a Siemens mentor.

Hackathon at Siemens AI lab.