

# Ou Changkun

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## Resume

Stop talking. Just coding.



### Education

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- **University of Munich (LMU)** Munich, Germany  
*Master of Science in Computer Science; current GPA: 2.05/1.00* Apr. 2018 – Present
- **University of Munich (LMU)** Munich, Germany  
*Master of Science in Human-Computer Interaction; current GPA: 1.87/1.00; [Transcript](#)* Oct. 2016 – Feb. 2018 (exp.)
- **University of Electronic Science and Technology of China (UESTC)** Chengdu, China  
*Master of Engineering in Software Engineering* Aug. 2016 – Sep. 2016
- **Southwest University for Nationalities (SWUN)** Chengdu, China  
*Bachelor of Engineering in Computer Science; GPA: 3.74/4.0; Ranking: 1/154; [Transcript](#)* Sep. 2012 – Jul. 2016

### Recent Work Experiences

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- **Academic tutor** Munich, Germany  
*LMU Lecture “[Deep Learning and Artificial Intelligence](#)” WiSe 2018/19* Oct. 2018 – Feb. 2019 (expected)
  - Materials and notes: [Homepage](#)
- **LabEx** Chengdu, China  
*Backend engineer (Remote, part-time)* Mar. 2018 – Sep. 2018
  - **Backend:** Go, microservices, transport layer proxy
- **Academic tutor** Munich, Germany  
*LMU Lecture “[Machine Learning](#)” SoSe 2018* Aprl. 2018 – Jul. 2018
  - Materials and notes: [Homepage](#)
- **MagicLingua** Munich, Germany  
*Fullstack engineer (Freelance)* Nov. 2017 – Mar. 2018
  - **Speech recognition:** Neural network squeezing; Audio streaming solutions
  - **Language Processing:** Conversation understanding; Language level modelling; Answers fault-tolerance
  - **Web development:** Angular; Spring; WebSocket; MongoDB; Elasticsearch; Serverless

### Recent Open Projects

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- **goscheduler:** [a high-performance reliable task scheduling package in Go](#)
- **Modern C++ Tutorial:** [the fastest guide towards modern C++](#)
- **Tensorflow docs translation:** [major contributor and project maintainer](#)
- **Juejin Translation Public Community:** [major contributor](#)
- **GitHub for more:** [github.com/changkun](https://github.com/changkun)

### Selected Skills

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- **Languages:** go; python; javascript (typescript); c/c++ (for optimization); markdown; L<sup>A</sup>T<sub>E</sub>X; native Chinese; fluent professional English; elementary German
- **Systems/Tools:** General Linux DevOps; Docker; AWS/AlibabaCloud; MySQL/MongoDB/Redis
- **Frameworks:** sklearn/tensorflow/keras/opencv/numpy/matplotlib, flask, vue/angular/electron/jquery, node/express, beego/gin-gonic
- **Experienced Fields:**
  - **Human side:** Ubiquitous interaction techniques; User study; Quantified user experience; Website prototyping; Crowdsourcing strategy

- **Machine side:** Statistical learning theory (specialize in generalization); Computer vision (specialize in convolutional network); Computer networks (specialize in transport layer protocols); Nature language processing (specialize in recurrent network methods); Distributed computing (specialize in microservices and consensus protocols)
- **Mathematics:** Stochastic process; Probability; Elementary number theory; Formal logic and proof
- **Certificates:** Coursera, Andrew Ng: [Deep Learning Specializations](#), certificates: [1](#), [2](#), [3](#), [4](#), [5](#)

## Publications

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- Changkun Ou. *Automated UI Discovering for Web Applications (draft)*. **Master Thesis for HCI**, Inprogress, 2018.
- Changkun Ou. *An Introduction to Recent Mobile Affective Inference Techniques: Methods, Applications and Challenges*. Advanced Seminar Media Computer Science, IFI LMU, 2018. [English](#), [Slides](#).
- Matthias Geiger, Changkun Ou, Cedric Quintes. *WatchOut: A Road Safety Extension for Pedestrians on a Public Windshield Display*. Lercture Advanced Topics in HCI, IFI LMU, 2017. [English](#).
- Changkun Ou, Yifei Zhan, Zhe Li. *A Novel GWAP Disaster Monitoring System*. Lercture Human Computation, IFI LMU, 2017. [English](#)
- Changkun Ou, Yaxi Chen(responsible professor), Andreas Butz(co-reviwer). *Designing Alternative Contact-free Control Modalities for Smart Watches*. 2016, **Bachelor Thesis**. [Simplified Chinese](#), [English](#)
- Changkun Ou, Yaxi Chen. *Combining Touch Biometrics and Motion Sensors for Hand Posture Recognition and User Authentication System*. Journal of Southwest University for Nationalities(Nature Science Edition). 2016, 42(4):429-435. [Simplified Chinese](#)
- Changkun Ou, Zhaoyang Guo, Yaxi Chen. *Space interactions based on monocular vision and simple gestures*. Journal of Southwest University for Nationalities(Natural Science Edition). 2014, 40(16):871-876. [Simplified Chinese](#)
- Changkun Ou, Mu Huang, Mengxin Shi, Jiang Cheng. *A Study in Keep-Right-Except-To-Pass Rule*. 2014, **MCM Meritorious Winner** [English](#)

## Selected Talks

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- Changkun Ou. *On the development of Quantified UX Metric*. Design Workshop II, IFI LMU, 2018 [English](#).
- Changkun Ou. *Capsule Network with Routing Mechanism*. Advanced Seminar Deep Learning, IFI LMU, 2018 [Part 1](#), [Part 2](#).
- Changkun Ou. *Understanding Generalization in Deep Learning*. Advanced Seminar Deep Learning, IFI LMU, 2018. [English](#), [Video](#).
- Hermann Redich, Patrick Börzel, Isabella Galter, Collin Leiber, Changkun Ou *Convolutional Neural Networks from Zero to Hero*. Advanced Seminar Deep Learning, IFI LMU, 2018. [English](#).
- Changkun Ou. *Mathematical Modelling Tutorial (Mandarin Chinese Video Series)*. 2016, [YouTube Playlist](#)