# Ou Changkun

Resume

Chengdu, China

Apr. 2018 - Dec. 2018

Stop talking. Just coding.



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### Education

University of Munich (LMU) Munich, Germany Research Assistant Feb. 2019 - Present

University of Munich

Munich, Germany Master of Science in Human-Computer Interaction; GPA: 1.63/1.00 Oct. 2016 - Jan. 2019

Southwest University for Nationalities (SWUN)

Bachelor of Engineering in Computer Science; GPA: 3.74/4.0; Top 1 Student Sep. 2012 - Jul. 2016

Work Experiences

Academic tutor Munich, Germany

LMU Lecture "Machine Learning" and "Deep Learning and Artificial Intelligence" Aprl. 2018 - Feb. 2019

o SoSe 2018, materials and notes: Homepage

• WiSe 2018/19, materials and notes: Homepage

LabEx Chengdu, China

Vice President of Software Engineering (Remote)

• Backend: Infrastructure architecting and development: multi-cloud automation, remote desktop protocols, auto scaling, microservices

MagicLingua Munich, Germany

Fullstack Engineer (Freelance)

Nov. 2017 - Mar. 2018 • Speech recognition: Neural network squeezing; Audio streaming solutions

- o Language Processing: Conversation understanding; Language level, modelling; Answers fault-tolerance
- Web development: Angular; Spring; WebSocket; MongoDB; Elasticsearch; Serverless

#### Skills

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

- Changkun Ou, Yifei Zhan, Yaxi Chen. *Identifying Malicious Players in GWAP-based Disaster Monitoring Crowdsourcing System*. In IEEE ICAIBD' 19: Proceedings of the 2nd International Conference on Artificial Intelligence and Big Data. Chengdu, Sichuan, China, May 25-28, 2019.
- Changkun Ou, Jingyi Li, Yong Ma. Cultivation and Incentivization of HCI Research and Community in China: Taxonomy and Social Endorsements. In CHI'19 Workshop on "HCI in China: Research Agenda, Education Curriculum, Industry Partnership, and Communities Building", Glasgow, UK, May 2019, 2019.
- Changkun Ou, Malin Eiband(advisor), Daniel Buschek(co-advisor), Heinrich Hußmann(responsible professor).

  Understanding and Predicting Web Browsing Behavior. 2019, Master Thesis.
- Changkun Ou. An Introduction to Recent Mobile Affective Inference Techniques: Methods, Applications and Challenges. In 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. In Lercture Advanced Topics in HCI, 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
- Yaxi Chen, Changkun Ou. Combining Touch Biometrics and Motion Sensors for Hand Posture Recognition and User Authentication System. In Journal of Southwest University for Nationalities (Nature Science Edition). 2016, 42(4):429-435. Simplified Chinese
- Yaxi Chen, Changkun Ou, Zhaoyang Guo. Space interactions based on monocular vision and simple gestures. In 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. In The Mathematical Contest in Modeling, 2014, **Meritorious Winner** English

#### Open Talks

- Changkun Ou. A Glimpse to the Advances of Mesh Representation Learning. Internal Doctoral Colloquium Spring 2019 English.
- Changkun Ou. *Understanding and Predicting User Browsing Behavior*. Masters Defence Presentation, 2019 English.
- 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). 2016, YouTube Playlist

## Open Source Projects

- $\bullet$   $\it Go$   $\it under\ the\ hood$ : a book for source code study of programming language Go
- Modern C++ Tutorial: a book provides 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