

# Ou Changkun

Munich, Germany

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[changkun.us/about](http://changkun.us/about)

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## EDUCATION

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- **University of Munich (LMU)** Munich, Germany  
*Master of Science in Human-Computer Interaction* since Oct. 2016
- **University of Munich** Munich, Germany  
*Exchange Student in Media Informatics* Sep. 2015 – Feb. 2016
- **Southwest University for Nationalities (SWUN)** Chengdu, China  
*Bachelor of Engineering in Computer Science; GPA: 3.74/4.0 (1/154)* Sep. 2012 – Jun. 2016

## WORK EXPERIENCE

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- **Shiyanlou** Chengdu, China  
*Software Engineer (Intern)* Jun. 2016 – Sep. 2016
  - **shiyanlou-logsys**: Built & maintained ELK+Redis distributed log analytics system;
  - **shiyanlou-desktop**: Developed a cross-platform Electron Windows/macOS/Linux desktop client;
  - **shiyanlou-recosys**: Developed a course recommendation system based on collaborative filtering through Python;
  - **shiyanlou-courses**: Wrote 17 crash and advanced tutorials for C++ users.

## SELECTED PROJECTS

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- **UniWorX Monitor** Munich, Germany  
*Personal Project* Mar. 2017
  - **Tech Stack**: Python, Polymer, Node.js Express, Electron
  - **Description**: Developed an unofficial better LMU UniWorX System with new courses notifications
- **Munich Renting Tool** Munich, Germany  
*Personal Project* Oct. 2016
  - **Tech Stack**: JavaScript, Python, Google Map API, BeautifulSoup4
  - **Description**: A location visualization tool for Munich Studentenwerk private savings
- **Designing Alternative Contact-free Control Modalities for Smart Watches** Chengdu, China  
*Bachelor Thesis* Apr. 2016 – Jun. 2016
  - **Tech Stack**: Swift, Node.js, Web Socket, watchOS, iOS, Leap Motion, Git
  - **Description**: Developed an alternative way – midair gesture control – to operate smart watches
- **Implementation of Interaction Perception Center** Chengdu, China  
*SWUN National Student-Innovative Project at SWUN Guigu Lab* Apr. 2014 – Apr. 2015
  - **Responsibility**: Team leader and development
- **Research on Spetical Interaction** Chengdu, China  
*SWUN Normal Student-Innovative Project at SWUN Computer Vision Lab* Jun. 2013 – Dec. 2013
  - **responsibility**: Team leader and development
- **More Open Source Projects**: [github.com/changkun](https://github.com/changkun)

## SKILLS

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- **Languages:** python; javascript; c; c++; obj-c; swift; markdown/pandoc; L<sup>A</sup>T<sub>E</sub>X; Native Chinese Speaker; Professional Fluent English; Elementary German
- **Systems/Tools:** Mac user; General Linux DevOps; Docker; AWS/DigitalOcean/Aliyun; SQL/MongoDB; zsh/tmux/vim/vscode
- **Frameworks:** numpy/opencv/matplotlib/sklearn/tensorflow, flask, jquery/react/vue/polymer/electron, node/express
- **Knowledges:**
  - **Human Side:** Human-Computer Interaction; User Study; User Experience; Product Prototyping; Human Computation; Social Psychology
  - **Machine Side:** Machine Learning; Recommendation System; Big Data Mining; Computer Vision; Distributed Computing; Compiler Technique; System Architecture
  - **Mathematics:** Functional Analysis; Stochastic Process; Analytic Number Theory; Formal Logic and Proof

## PUBLICATIONS

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- Changkun Ou. The Fastest Guide of C++11/14. 2016, [Simplified Chinese](#), [Source Code](#)
- 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. Mathematical Modeling Tutorial (Mandarin Chinese Video Series. 2016, [YouTube Playlist](#)
- 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](#)

## HONORS & AWARDS

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| • <b>App@Night 2016 hackthon at University of Munich</b><br><i>IBM IoT team Successful Participant</i>         | Munich, Germany<br><i>Nov. 2016</i> |
| • <b>hackaTUM at Technical University of Munich</b><br><i>Landeshauptstadt Muenchen Successful Participant</i> | Munich, Germany<br><i>Nov. 2016</i> |
| • <b>China National Scholarship</b><br><i>At UESTC</i>   | Chengdu, China<br><i>Sep. 2016</i>  |
| • <b>SWUN Bachelor Graduation Thesis Award</b><br><i>Excellent Thesis</i>                                      | Chengdu, China<br><i>Jun. 2016</i>  |
| • <b>Sichuan Province University Graduates Award</b><br><i>Outstanding Student</i>                             | Chengdu, China<br><i>Jan. 2016</i>  |
| • <b>First-class Scholarship</b><br><i>SWUN Outstanding Student</i>  | Chengdu, China<br><i>Nov. 2015</i>  |
| • <b>SWUN College Student-Innovative Activity 2014</b><br><i>Annual Excellent Project</i>                      | Chengdu, China<br><i>Jun. 2015</i>  |

- **The National College Student-Innovative Projects** Chengdu, China  
*Concluding Certificate* Jun. 2015
- **Sichuan Computer Production Competition** Chengdu, China  
*2nd Award* May 2015
- **First-class Scholarship** Chengdu, China  
*SWUN Outstanding Student* Nov. 2014
- **China National Scholarship** Chengdu, China  
*At SWUN* Sep. 2014
- **Sichuan Computer Production Competition** Chengdu, China  
*2nd Award* Jun. 2014
- **Mathematical Contest in Modeling(MCM) 2014** Chengdu, China  
*Meritorious Winner* Apr. 2014
- **First-class Scholarship** Chengdu, China  
*SWUN Outstanding Student* Nov. 2013
- **Mathematical Contest in Modeling(MCM) 2013** Chengdu, China  
*Successful Participant* Apr. 2013

## SELECTED PUBLIC ACTIVITIES

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- **Juejin Translation Project** [GitHub](#)  
*Translator, articles translation from English to Chinese* since Apr. 2017
  - **Translation:** [How to build complex user interfaces without going completely insane](#)
  - **Proofreading:** [Everyone is a designer. Get over it.](#)
  - **Translation:** [How to pretend you're a great designer](#)
- **Personal Translation** since May 2016  
*Translation from English to Chinese*
  - **Leap Motion Official Development Documentation Translation:** full translation
  - **Swift 3 API Design Guidelines:** full translation
  - **The Swift Programming Language Chinese Translation:** responsible for Release Changes chapter
- **Academic Tutor** Chengdu, China  
*Cooperation lecture "Human-Computer Interaction I" between LMU and SWUN* Jul. 2015
- **Student Volunteer** Chengdu, China  
*for Conference Smart Graphics 2015* Aug. 2015
- **SWUN Guigu Lab Team Leader** Chengdu, China  
*Tutorial for members applying projects* Sep. 2014 – Jun. 2015
- **Mathematical Modeling Association Academic Vice Director** Chengdu, China  
*Academic tutorial for new members* Oct. 2012 – Jun. 2014
- **Computer Application and Development Association Core Member** Chengdu, China  
*Programming tutorial for new members* Oct. 2012 – Dec. 2013
- **SWUN Organization federation Executive Member** Chengdu, China  
*Design & Organization* Oct. 2012 – Jun. 2013