# Taoyuan Wang

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#### PROFESSIONAL EXPERIENCE

#### **Software Engineer in Appen**

Shanghai, China

2019-present

- China R&D Startup Team
  - Data Collection Tools: C++/JUCE client and Python/Flask server
  - Ampersand/Global Annotation Platform
    - ◆ Localize the platforms to support China business
    - ◆ Develop OCR features to improve annotation efficiency (by 28%)
  - Lidar Sensor Fusion Annotation Platform
    - Participate in the system design from scratch
    - ◆ Research on point cloud object detection and 2D/3D calibration

# **Software Engineer in Works Applications**

Shanghai, China

Shanghai Tech Lead Group

2018-2019

- STM Project: Maven, Vue.js, Spring Boot, and Hibernate
- AI WORKS HUE HR Suite: Spring Framework, JUnit, and CI/CD with Jenkins

#### Research Assistant in Academia Sinica

Taipei, Taiwan

CKIP Group of Natural Language Processing Laboratory

2017-2018

- Research Topic: Chinese subtask of Short Text Conversation chatbot at NTCIR
  - ◆ Implement sequence to sequence RNN-based models with PyTorch
  - ◆ Maintain a large repository of post-comment pairs from Weibo datasets
  - Use appropriateness scores of comments as reward for reinforcement learning

# SIDE PROJECTS

- Boki
  - A self-customized accounting Android app designed for my own studying in Japan
  - Automatically rate exchange between JPY and TWD
  - Monthly budget control and basic analysis functions all in an extremely simple-to-use design

# Midnight Radio

- A platform to share music, lyrics, and pictures with friends
- Simulate radio-like live streaming by PHP and AJAX only with web server
- Quality assurance by synchronization mechanisms

#### watchdog

- A Raspberry Pi remote-control webcam
- Simple web UI for controlling servo motors to change the view of webcam
- Periodically check the server status and restart the system if no response

## p2p.tv

- A low latency P2P live video platform to save server resources
- Control peer keeping server and media server for streaming with Servlet/JSP
- Create browser plugins of peer execution with FireBreath and NSIS
- Customize player and chatroom for website with AJAX

#### **EDUCATION**

# **National Tsing Hua University**

Hsinchu, Taiwan

Bachelor/Master of Computer Science

2010-2016

- Bachelor GPA: 3.94/4.3 (Major GPA: 4.15/4.3), Master GPA: 4.08/4.3
- Internet Laboratory
  - Teacher Assistant
    - ◆ Introduction to Computer Networks for undergraduates
    - Discrete-Event Simulation for graduates
  - Research Topic: Dynamic Routing and Spectrum Assignment in Elastic Optical SDN
    - Design a hybrid device architecture with modulation adaptive grooming
    - ◆ Simulate a specific network environment considering physical impairments with C/C++
    - ◆ Research on reinforcement learning and specific policy-based heuristic algorithms with auxiliary graphs to minimize the blocking ratio of dynamic connection request

Nagoya University Nagoya, Japan

Program of Academic Exchange

2014-2015

- Database Laboratory
  - Develop rule-based chatbots with LINE and Facebook interface based on opensource projects
  - Train dialog models with datasets of American drama subtitles and conversation records with human beings

Tsinghua University Beijing, China

Summer Program of Java, Android, and Servlet/JSP

2012

- Project: Mobile User Sensing System
  - Android app client to collect local sensor data and interact with Servlet/JSP server
  - Design web UI for data management, analysis, and visualization

#### HONORS

- 2014 National Tsing Hua University Exchange Scholarship
- 2013 Outstanding Academic Achievement Award
- 2013 Excellent Junior of EECS Scholarship

## **SKILLS**

- Programming Languages: C/C++, Java, JavaScript, Python
- Languages: Mandarin (native), English (TOEIC: 895, TOEFL: 99, GRE: 325/3), Japanese (JLPT: N1)