Taoyuan Wang

(+886) 931051038 | (+86) 18301930636 | alanwanga@icloud.com

PROFESSIONAL EXPERIENCE

Software Engineer in Appen   **Shanghai, China**
- China R&D Startup Team   2019–present
  - Ampersand/Global Annotation Platform for texts/images
    - Localize the platforms to support China business
    - Develop OCR features to improve annotation efficiency (by 28%)
  - LiDAR Sensor Fusion Annotation Platform for self-driving cars
    - Design the platform from scratch (frontend with React and Three.js/WebGL, backend with Flask and Spring, deploy on AWS, and integrate with Figure Eight platform)
    - 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++ (intermediate), Java (advanced), JavaScript (advanced), Python (advanced)
- **Languages:** Mandarin (native), English (TOEIC: 895, TOEFL: 99, GRE: 325/3), Japanese (JLPT: N1)