

CHI-JUI WU

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SUMMARY

- 3 years of software design and development experience in human-centered interactive systems in industry and research settings.
- Developed, deployed, and maintained data and machine learning pipelines, web applications, and RESTful APIs.
- Experienced in cross-department and cross-discipline collaboration.

PROFESSIONAL EXPERIENCE

Data Scientist, Taishin International Bank, Taiwan

Jan 2019 – present

- Built house loan demand **predictive models** by leveraging customer interactions at the contact center, generated over NT\$ 200 million annual revenue from retargeting campaigns. Technologies: natural language processing, machine learning.
- Developed a **message analytics dashboard**, simplified the internal processes of accounting and cost management. Technologies: regex, Oracle SQL, PowerBI.
- Developed a **search engine** and analytics platform for unstructured data (i.e. contact center conversations and customer journey), supported the exploration of customer voice by product managers and data scientists as well as internal operation teams. Technologies: Elasticsearch, Docker, Flask.
- Developed **chatbots** for competitor news and credit card campaigns **web crawlers**, enabled internal banking staff to search and subscribe to latest events and fintech news. Technologies: LINE API, Flask, Google Cloud Platform.
- Collaborated on writing multiple industry **award-winning papers** on innovative digital transformation projects: Hybrid Data and Message Flow.

PUBLICATIONS

Frederik Brudy, Christian Holz, Roman Rädle, **Chi-Jui Wu**, Steven Houben, Clemens Klokmoose, and Nicolai Marquardt. Cross-Device Taxonomy: Survey, Opportunities and Challenges of Interactions Spanning Across Multiple Devices. In *Proceedings of the 37th Annual ACM Conference on Human Factors in Computing Systems* (24% acceptance rate, 2,900 submissions). Glasgow, Scotland, UK, 2019. ACM, New York, NY.

May 2019

Chi-Jui Wu, Steven Houben, Nicolai Marquardt. EagleSense: Tracking People and Devices in Interactive Spaces using Real-Time Top-View Depth-Sensing. In *Proceedings of the 35th Annual ACM Conference on Human Factors in Computing Systems* (25% acceptance rate, 2,400 submissions). Denver, Colorado, USA, 2017. ACM, New York, NY.

May 2017

Chi-Jui Wu, Aaron Quigley, David Harris-Birtill. Out of Sight: A Toolkit for Tracking Occluded Human Joint Positions. In *Personal and Ubiquitous Computing*, 21(1), 125-135. 2017. Springer London.

Dec 2016

EDUCATION

PhD. Student in Human-Computer Interaction

School of Computing and Communications, Lancaster University (UK)
Areas of Research: Cross-Device Computing, Accessibility

Jan 2018 – Aug 2018

MRes. Computational Statistics and Machine Learning, Distinction

Department of Computer Science, University College London (UK)
Areas of Research: Proxemic Interaction, Machine Learning

Sep 2015 – Sep 2016

BSc. Computer Science, First-Class Honours

School of Computer Science, University of St Andrews (UK)
Areas of Research: Human-Computer Interaction, Interactive Systems

Sep 2011 – Jun 2015

SKILLS

Programming Languages

Python, Java, C, C++, C#, JavaScript, MATLAB, SQL

Software Engineering Tools

Git, Docker

Areas of Software Development

Scientific computing, machine learning, depth-sensing, computer vision, information visualization, mobile and web development, user interface development

User-Centered Research

Lab study, usability study, technical evaluation, survey, interview, content analysis

RESEARCH & TEACHING EXPERIENCE

English Teaching Assistant (Taiwanese Military Substitute Service), Wanrong Junior High School, Hualien, Taiwan Jan 2017 – Jan 2018

- Assisted classroom activities and one-on-one lessons. Led students in English singing, storytelling, and speech contests. Received the excellence service award.

Research Assistant, University College London Nov 2015 – Sep 2016

- Developed a depth-sensing, proxemic-aware system to track spatial and postural information about people and devices.

Research Intern, University of St Andrews Jun 2015 – Sep 2015

- Developed a web-based application to automate software configuration and virtualization for improved reconfigurability and sustainability.

Research Intern, University of St Andrews Jun 2014 – Sep 2014

- Examined depth-sensing visualizations to enhance users' visual and spatial awareness when interacting with a large display and a Microsoft Kinect.

Co-founder and Full-Stack Developer, scrim.me Jun 2014 – Dec 2016

- Developed an online platform for Team Fortress eSports players to find teammates and organize practice matches. Reached 4500+ users.

AWARDS AND HONORS

Faculty of Science and Technology Scholarship, Lancaster University Jan 2018

ACM SIGCHI Reviewer, ACM CHI 2018 Oct 2018

ACM SIGCHI Student Travel Grant, ACM ISS 2016 Aug 2016

Hackathon Honorable Mention, UCL Data Science Student Challenge Feb 2016

Hackathon Best Use of API (Mendeley), Hack Cambridge Jan 2016

Dean's List, University of St Andrews Jun 2015

Dean's List, University of St Andrews Jun 2014

Hackathon Finalist, Barclays Openminds Hackathon Nov 2013

Hackathon Winner, J.P. Morgan Code for Good Challenge Nov 2013

International Undergraduate Scholarship, University of St Andrews Sep 2011

LANGUAGES

English (fluent), **Chinese** (native), **Taiwanese** (native)