Chih-Hao Wang

GitHub: OscarWang114 • LinkedIn: oscarwang114

EDUCATION

Carnegie Mellon University — Pittsburgh, US
Intelligent Information Systems, M.S. — Aug 2021 – Dec 2023

Waseda University — Tokyo, Japan
Computer Science and Engineering, B.E. – GPA: 3.94/4.00 — Sep 2015 – Mar 2020

National University of Singapore — Singapore
One-year exchange program — Aug 2017 – May 2018

PUBLICATION

Wang, C.H., Kato, S., and Sakai, T.: RSL19BD at DBDC4: Ensemble of Decision Tree-based and LSTM-based Models, *Proceedings of WOCHAT and DBDC, IWSDS 2019, pdf at arXiv:1905.01799*

- Investigated Decision Trees and DNN approaches for the Fourth Dialogue Breakdown Detection Challenge.
- Ranked 1st, 2nd place on English and Japanese dataset, respectively.

EXPERIENCE

Waseda University Sakai Laboratory – *Research Member* — Sep 2018 – Mar 2020
Advisor: Prof. Tetsuya Sakai

- Investigated ML approaches for NLP, including sentiment analysis and dialogue breakdown detection.

LeapMind – *Summer Intern (Deep Learning)* – *Internship Blog* — Aug – Sep 2019

- Developed a DNN for optical flow estimation on CPU and FPGA-based devices using TensorFlow.
- Reduced the inference time by 53% with low-bit quantize-aware training.

Yahoo! – *Intern (E-commerce Backend Engineer)* — July – Aug 2018

- Created RESTful APIs by working with 2 designers and 2 frontend engineers in a scrum team.
- Increased throughput by 274% with 95th percentile response time less than 200ms using Redis.
- Scaled the project with load balancing and boosted performance using proxy caching.
- **Tools:** Node.js, Swagger, Apache Traffic Server, Redis, MySQL, JMeter, Screwdriver.cd

PROJECTS *(more at github.com/OscarWang114)*

Multimodal Video Ads Tagging Challenge – *Tencent Advertising Algorithms Competition* — May – July 2021
Semi-final rank 25 / 50 • Score 3% below 1st place, 16% above baseline

- Performed multi-label classification of video ads containing 3 modalities: image, audio, and text.
- Fused cross-modality temporal information using multimodal Transformers.

Address Elements Extraction Challenge – *Shopee Code League* — Mar 2021
Rank 37 / 1034 • Score 8% below 1st place

- Extracted entities from Indonesian addresses using BERT for token-level classification.
- Increased score by 3% through handling mismatches between input data and labels.

WasedaTime – *www.wasedatime.com* — Dec 2017 – Sep 2020
Founder • Source Code

- Led a 6-person team to develop a full-stack web application for Waseda students.
- Acquired more than 5,000 returning users and 400K page views.
- **Tools:** JavaScript, React, Redux, Node.js, MongoDB, Travis CI

SKILLS

- IT: Python, C, Java, HTML, CSS, JavaScript, SQL Databases, MongoDB
- Languages: English (TOEFL: 117/120), Japanese (N1), Chinese (Native)