Xi Wen

looking for summer intern 06/10/2023 - 09/22/2023

Mobile: (408)806-4969
Email: xwen20@ucsc.edu
Address: 707 Pelton Ave Apt 203, CA, 96050

SKILLS

Programming languages: C/C++, Python, SQL, Java, PHP, JavaScript
Tools: Git, TensorFlow, PyTorch, VS Code, Docker, LaTeX
Operating systems: Linux(Ubuntu), MacOS, Windows

EDUCATION

University of California, Santa Cruz — Santa Cruz, CA
M.Sc. in Computer Science and Engineering — *Sep 2022 – Fall 2023 (M.Sc.)*
Hong Kong Polytechnic University — Hong Kong
B.Sc. in Computing; Major GPA: 3.61/4.00 — *Sep 2016 – June 2020 (B.Sc.)*
University of Maryland, College Park — College Park, MD
Exchange Program; Major GPA: 3.85/4.00 — *Jan 2019 – May 2019*

WORK/RESEARCH EXPERIENCES

Tencent Holdings Ltd. — Beijing, China
*Algorithm Engineer(T7), on **video recommendation*** — *Aug 2020 – July 2022*
*for **WeChat Channels** (using **C++** and **Python**):*

- **Added music as a source of recalling music:** Trained a **CNN model** to predict user favourite background music based on user favourite songs and recalled good videos with those background music. Increased **total play time by 7%** and **Day 1 retention by 0.3%**.
- **Identified, implemented and incorporated features for the ranking models:** Introduced user historical portraits and video tags provided by external teams, defined new features like user long-term interest tags, and incorporated them into the ranking model with appropriate crossover. Increased **total play time by 4%** and **video views by 2%**.
- **Implemented a thorough monitoring alarm and hourly report system for features and labels in data flow:** Customized checking methods for each feature or label by defining error codes, code refactoring and running statistics from the **ClickHouse** table. **Caught 4 bugs** brought by upstream changes.

UMIACS, University of Maryland, College Park — College Park, MD
*Research Assistant, advised by Dr. Jordan Boyd-Graber on **NLP*** — *June 2019 – Aug 2019*

- **Built a neural network retention model in Python to estimate the users' memory strength:** Fine-tuned **the BERT model** to learn the text representation and encode the flashcard questions and added other users' features like user historical correct rate. Increased **the accuracy** of predicting the probability of the user recalling the flashcard answer **by 7%** than the logistic regression baseline.

Hong Kong Polytechnic University — Hong Kong
*Research Assistant, advised by Dr. Yixin Cao on **graph theory, computational complexity*** — *Feb 2018 – June 2018*

- **Worked on the Steiner tree problem (STP) on graphs:** Submitted a heuristic algorithm **in C** to PACE 2018 solving 90% instances each within 2 seconds with an approximation ratio less than 10.

MIT CSAIL — Cambridge, MA
*Visiting Student, advised by Prof. Hal Abelson on **block programming implementation*** — *Jul 2017 – Aug 2017*

- **Indoor positioning blocks:** Built IoT indoor positioning blocks by using Bluetooth Low Energy **in Java** for MIT App Inventor.

PUBLICATIONS AND PAPERS

1. Wen Xi and Evan W Patton.
   Blocks-Based Approaches to Internet of Things in MIT App Inventor.
   SPLASH 2018 BLOCKS+ Workshop, Nov. 5, 2018, Boston, MA. [Paper].

SELECTED HONORS AND AWARDS

The Hong Kong Polytechnic University Scholarship (2017)

HKSAR Government Scholarship Fund – Reaching out Award (2017)

Student of the Year with Best Academic Performance (2016)