Huang Chengyu

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EDUCATION

National University of Singapore   Aug 2019 - May 2023

Bachelor of Computing, Major in Computer Science
- Second major: Mathematics
- Cumulative Average Point: 4.98/5.0; Rank: $\leq 2/759$; Most Outstanding Graduate

Swiss Federal Institute of Technology in Zurich   Feb 2022 - July 2022
- Exchanged at ETH Zurich and took the courses in Machine Learning, 3D Vision, Natural Language Processing, Convex Optimization, German A1.1, and German A1.2
- Represented NUS as exchange ambassador and promoted NUS on campus booth event

RESEARCH EXPERIENCE

Research Intern, H2Lab, University of Washington   May 2023 - Present
- Investigated Reinforcement Learning from Human Feedback for response generation with references, a direction that aims at enhancing the truthfulness of language models

Research Assistant, School of Computing, NUS   May 2023 - Present
- Designed and implemented an NLP based credential-taking intention and text brand detector for HTML webpages, which increases recall and precision of an existing phishing webpage detector

Research Intern, NExT++ Research Center, NUS   Oct 2021 - May 2023
- Adapted a model based on GAN and LSTM for response generation in a multi-party context with the help of relational thinking, which was shown to be effective without topic or thread labels
- Designed a global clustering model for conversation disentanglement with contrastive learning and K means, and the model was shown to be more effective than traditional 2-stage models
- Proposed reordering techniques for conversation disentanglement with the help of curriculum learning, which can increase the generalizability of existing models on different dialogues
- Constructed a multi-party response generation pipeline with conversation disentanglement, which can generate accurate and diverse responses in multi-party setting

Researcher, Undergraduate Research Opportunity, NUS   May 2021 - Oct 2021
- Investigated the existing fact checking tools, which revealed the need for the judgments made by these tools to be more explainable
- Implemented a fact checking system that can generate both veracity prediction and the corresponding explanation when given a claim

PUBLICATIONS

Conference papers
- Chengyu Huang, Zheng Zhang, Hao Fei, and Lizi Liao. "Conversation Disentanglement with Bi-Level Contrastive Learning." *Proceedings of the Findings of the Association for Computational Linguistics: EMNLP 2022*. [paper]
- Suyu Liu, Chengyu Huang, Libo Qin, Hao Fei, Tat-Seng Chua, and Lizi Liao. "Disentangle Multi-party Conversations as Reordering with Curriculum." *The 61st Annual Meeting of the Association for Computational Linguistics,* submitted. [paper]

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ACADEMIC SERVICE

Reviewer, Dialogue and Interactive Systems track, EMNLP   July 2022 - Aug 2022

HONORS AND AWARDS

IMDA Excellence in Computing Prize [certificate]   5 June 2023
- Most Outstanding Graduate in the Bachelor of Computing programme

Dean's List, School of Computing   Jan - May 2023; Jan - May 2021; Aug - Dec 2020

Senior Middle 2 Scholarship   Aug 2019 - May 2023

TEACHING EXPERIENCE

Teaching Assistant, School of Computing, NUS
- Design and Analysis of Algorithms   Aug 2021 - Nov 2021
- Computer Organization   Jan 2021 - Apr 2021
- Discrete Structures   Aug 2020 - Nov 2021
- Programming Methodology   Aug 2020 - Nov 2020

PROFESSIONAL EXPERIENCE

Backend Engineer Intern, Global Payment, ByteDance   Sep 2022 - Jan 2023
- Developed a storage platform with Go and MongoDB that maintains bank records, which increased the payment transaction success rate by a significant percentage
- Wrote scripts in Go to scan user database, and corrected more than 10000 inconsistent payment records between original and sharded tables, which enhanced the CRUD operation stability

Contributor and Mentor, RepoSense [repository]   Jan 2021 - May 2023
- Added new features such as highlighting and binary format support with Vue.js, Pug, and css, which enhanced the user interface of RepoSense, a contribution analysis tool of Git repositories
- Maintained the project, reviewed close to 100 pull requests, and made 5 product releases, which ensured it runs smoothly with 10 active developers and more than 1000 active users

Backend Engineer Intern, Global Payment, ByteDance   May 2021 - Aug 2021
- Implemented payment channels for Airwallex and GCash using RPC framework, which provided 2 new payment options for company products such as TouTiao
- Constructed an internal bot that monitors the transaction metrics from a TSDB and sends alerts to the engineers, alleviating the on-call team's burden and accelerating the error handling process

Developer Intern, Mobile Application**,** U Wave   May 2020 - Aug 2020
- Developed mobile pages for services such as module calendar and bus timing of U Wave with Flutter and Dart, which became new functionalities of the mobile application
- Collaborated in its campus promotion initiative, and invited NUS students to join its existing network of more than 10000 users on campus

ADDITIONAL INFORMATION

- **Skills**: Java, Python, C programming, PostgreSQL, Go, html, and css
- **Languages:** Chinese and English: Proficient; German: A1.2
- **Interests:** Basketball; Guitar; Drawing; Movies