Haochen Yuan

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EDUCATION

School of EECS, Peking University, Beijing, China Sep 2017 – July 2021

- B.S. in Computer Science and Technology
- Bachelor Thesis**:** Research on Text Style Transfer with Question Data

Intensive English Program, Yale Summer Session B, Yale University, CT, USA July 2019 – Aug 2019

School of Software and Microelectronics, Peking University, Beijing, China Sep 2021 – July2023

- B.E. in Software Engineering

School of Computer Science, Peking University, Beijing, China Sep 2022 – July 2025

- M.E. in Computer Architecture, Advisor: Zhi Yang
- Research Interests: Computer Networks and Distributed Systems

RESEARCH EXPERIENCES

Research on Text Style Transfer with Question Data Feb 2021 – June 2021

Bachelor's Thesis | Advisor: Junfeng Hu, Associate Professor at ICL, Peking University

- Proposed and implemented a controllable text paraphrase generation algorithm utilizing the Attention mechanism and the BiLSTM model; successfully achieved paragraph expression from generalized input to format sentences with fixed syntaxes.
- Leveraged the end-to-end method to train models and applied the word embedding algorithm, CBOW.
- Designed comprehensive datasets (10,000 sentence pairs) and aggregated quantitative metrics.(Acc72.13,BLEU52.69)

Progressive Graph-Signal Sampling and Encoding for Static 3D Geometry Representation Mar 2020 – Aug 2020

Lab Intern | Advisor: Wei Hu, Assistant Professor at WICT, Peking University

- Tasked with discovering a high-fidelity compression algorithm for point cloud datasets of static 3D geometry shapes.
- Proposed the utilization of a smooth 2D manifold in 3D space to approximate the geometric shape of a target object.
- Developed an algorithm by conducting repetitious iterations of linear interpolation on an initial point cloud data subset.

Fake News Detection with Machine Learning based method Mar 2020 – July 2020

Research Assistant | Advisor: Jindi, PhD at CSAIL, Massachusetts Institute of Technology

- Worked on detecting diverse types of Fake Web News through the utilization of NLP & ML methods.
- Leveraged two methods to encode the text: TF-IDF and Global Vectors for Word Representation.
- Utilized Support Vector Machines and text Convolutional Neural Networks for stance detection for Fake News.
- Separately tuned models to complete a fusion of them; utilized under-sampling and loss-weight adjustment to obtain 75.78(Acc) on the FNC-1 Challenge.

INTERN EXPERIENCES

Tencent | Software Engineer Intern | Map Product Quality Center, Engineering Performance Group Feb 2022 – May 2022

- Learned engineered code specifications, flow line production platform and project management methods.
- Provided back-end solutions for improving engineering performance in Tencent Map Product and relevant applications.
- Independently developed web application: Auto Registration for Development Platforms.

LEADERSHIP AND ACTIVITIES

Student Union, Peking University **|** Ministry of Supervision **|** Vice Minister Sep 2018 – June 2019

- Organized meetings, collected feedback from student representatives to improve service offered by Student Union.
- Organized teams to supervise the Council of Ministers of Peking University Student Union.

Mountaineering Association, Peking University | Ministry of Document | Vice Minister Sep 2018 – June 2019

- Contributed to the MAPKU 2018 Tibet Scientific Examination Team and the 2019 Climbing Skills Training Team.
- Led the Information department of MAPKU, which has over 300 members and maintains documents and certificates.

SKILLS

Programming Languages: C/C++, Python, Java, MATLAB

English Language: TOEFL Best Scores: 105 (Reading 30, Listening 27, Speaking 23, Writing 25), GRE: (V151, Q170)