HANG ZHAO

+1 (646)-932-6805 ◇ hangzhao2021@gmail.com ◇ 125 Terryville Rd, Port Jefferson Station, NY, 11776
LinkedIn: www.linkedin.com/in/realhangzhao Personal Website: hangzhaosbu.github.io

EDUCATION

Stony Brook University *Jan 2021 - Dec 2024 (Expected)*
Ph.D. Candidate in Computer Science (GPA: 3.83/4.00)

Stony Brook University *Jan 2019 - Dec 2020*
Master of Science in Computer Science
Courses: Machine Learning, Theory of Database Systems, Analysis of Algorithms, Data Visualization, Computing with Logic, System Fundamentals II, Principle of Programming Languages, Human-Computer Interaction

EXPERIENCES

Human-Computer Interaction Laboratory at Stony Brook University *Dec 2019 - Present*
Ph.D. Advisor: Prof. Xiaojun Bi
My research experiences are related to Machine Learning, Deep Learning (Transformer, CNN, LSTM), Reinforcement Learning (DQN), and AI medical diagnosis at Stony Brook University.

PUBLICATIONS

Hang Zhao, Kaiyan Ling, IV Ramakrishnan, M.D. Guy Schwartz, Xiaojun Bi.
Modeling Mouse-based Pointing and Steering Tasks for People with PD (submitted CHI 2024)
Description: We utilized CNN-Transformer models and Bayesian hierarchical models to detect Parkinson's disease (PD) symptoms on a time series dataset, achieving promising results (AUC=0.95, F1-score=0.96).

Kaiyan Ling, **Hang Zhao**, Xiangmin Fan, Xiaohui Niu, Wenchao Yin, Yue Liu, Cui Wang, etc.
Modeling Touch Pointing for People with Parkinson's Disease (submitted Ubicomp 2023)
Description: We applied CNN-Transformer models to classify Parkinson's disease (PD) on the time series dataset (plus data augmentation) collected from a Whac-A-Mole game designed on an Android smartphone.

Hang Zhao, Sophia Gu, Chun Yu, Xiaojun Bi.
Bayesian Hierarchical Pointing Models
The 35th Annual ACM Symposium on User Interface Software and Technology (UIST 2022)

Zhi Li, Maozheng Zhao, Didyendu Das, **Hang Zhao**, Yan Ma, etc.
Select or Suggest? Reinforcement Learning-based Method for High-Accuracy Target Selection on Touchscreen
CHI Conference on Human Factors in Computing Systems (CHI 2022)

Hang Zhao, Michael Wang, Xiaolei Zhou, Xiangshi Ren, Xiaojun Bi.
Variance and Distribution Models for Steering Tasks
The 34th Annual ACM Symposium on User Interface Software and Technology (UIST 2021)

Yu-Jung Ko, **Hang Zhao**, IV Ramakrishnan, Shumin Zhai, Xiaojun Bi.
Modeling One-Dimensional Touch Pointing with Nominal Target Width
The 47th Annual Graphics Interface Conference (Graphics Interface 2021)

Yu-Jung Ko, **Hang Zhao**, IV Ramakrishnan, Shumin Zhai, Xiaojun Bi.
Issues Related to Using Finger-Fitts Law to Model One-Dimensional Touch Pointing Tasks
CHI Conference on Human Factors in Computing Systems (CHI 2021)

Yu-Jung Ko, **Hang Zhao**, Yoosang Kim, IV Ramakrishnan, Shumin Zhai, Xiaojun Bi.
Modeling Two Dimensional Touch Pointing
The 33rd Annual ACM Symposium on User Interface Software and Technology (UIST 2020)

HONORS & AWARDS

Stony Brook University GAANN Fellowship Award (2023)
Best Paper Honorable Mention Award at 33rd Annual ACM Symposium on UIST 2021 (Top 5%)
Best Paper Honorable Mention Award at the International Symposium of CHI (Top 5%)
Kaggle Competition Silver Medal (Top 4%) On OTTO - Multi-Objective Recommender System

SKILLS

Programming Language: Java, Python, C++, R, JavaScript, MATLAB, Prolog, SML, Latex.
Library: TensorFlow, Keras, Pytorch, Scikit-learn, Pandas, NumPy, Matplotlib, Seaborn, Open-CV, Flask.