

XU HAN

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EDUCATION

Ph.D. Student in Computer Science

Sep 2017 - Present

University of Colorado Boulder, Boulder, USA

Research Interests: Human Computer Interaction, Data Science, Data Visualization

Advisor: Tom Yeh

GPA: 4.0 /4.0

B.E. in Electronic Engineering

Sep 2013 - Jun 2017

University of Science and Technology of China, hefei, China

Undergraduate Thesis Advisor: Joern Ostermann, Zhibo Chen

SELECTED PROJECTS

Alexa Skills Evaluation

Jun 2018 - Sep 2018

Sikuli Lab, University of Colorado Boulder, USA

- Developed a voice skill crawler to collect responses from 100 most popular Alexa skills (Python)
- Analyzed responses data and studied these skills' compliance situations of current design guidelines
- Proposed research agenda for future evaluation tool development
- Paper is under review

e-Health Tutorial for Elder People using Browser Extension

Jun 2018 - Present

Sikuli Lab, University of Colorado Boulder, USA

- Designed and developed a browser extension tutorial to guide elder people to explore health information website
- Designed user studies to evaluate user experiences of different version of tutorials

Recommendation System Implementation and Visualization Based on Yelp Data

March 2018 - May 2018

University of Colorado Boulder, USA

- Deployed machine learning methods to build a recommendation system based on the prediction of user's rating for business (Python, SQL), the result of Collaborative Filtering algorithm as references
- Blended several machine learning models by assigning weights and achieved best performance(AUC = 0.82)
- Visualized the selected features, feature rankings and model training process (Javascript, HTML & CSS)

Repeat Buyer Prediction Based on User Online Shopping Logs

Oct 2017 - Dec 2017

University of Colorado Boulder, USA

- Deployed machine learning techniques to predict whether a customer will become a repeat buyer (Python, SQL)
- Focused on feature engineering, extracted 129 features(user demographic features, user behavioral features, merchant-related features, user-merchant interaction features, big promotion features, slope features, similarity features, PCA features) and conducted feature ranking analysis
- Ranked 25% in the competition panel

Contact-free Camera Measurements of Heart Rate under Practical Scenarios

Feb 2017 - May 2017

Institute for Information Processing, Leibniz University Hannover, Germany

- Implemented heart rate detection algorithm based on human face video (MATLAB)
- Optimized the algorithm under different application scenarios and generated algorithm optimization guidelines
- Proposed an updated algorithm specifically for head rotation situation

Imitated Harry Potter World with openGL

Oct 2017 - Dec 2017

University of Colorado Boulder, USA

- Simulated a Harry Potter world involving particle engine, water wave simulation, 3D selection, ball moving simulation and interactive design (C++)

AWARDS

CSC(China Scholarship Council) National Scholarship	2017
UTSIP Scholarship, University of Tokyo	2016
Outstanding Student Scholarship, University of Science and Technology of China	2016, 2015, 2014
The Best Technology Award, Robogame2015, University of Science and Technology of China	2015

TEACHING EXPERIENCES

Teaching Assistant, CS Department, University of Colorado Boulder *Jan 2018 - May 2018*

- Teaching Principles in User Centered Design and Prototyping (CSCI3002: Human Centered Computing and Development)

Teaching Assistant, CS Department, University of Colorado Boulder *Sep 2017 - Dec 2017*

- Teaching data structures in C++ (CSCI2270: Data Structures)

RELEVANT SKILLS

Languages: C, C++, Python, Javascript, HTML & CSS, SQL, MATLAB
Software, System & Library: PostgreSQL, Git, Tableau, Linux, openGL