Hao Li

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EDUCATION

Carnegie Mellon University
Aug. 2019 Pittsburgh, PA
M.S. in Educational Technology and Applied Learning Sciences
School of Computer Science
GPA: 3.81 / 4.33

Beijing Normal University
2014 - 2018 Beijing, China
B.S. in Educational Technology
GPA: 3.82 / 4.00

COURSES

E-Learning Design
Educational Statistics
Personalized Online Learning
Interactive Data Science
Human AI interaction
Design Educational Games
Applied Machine Learning

SKILLS

Curriculum Development
Intelligent Tutoring Systems
Cognitive Task Analysis
Curriculum Design

Educational Data Mining
D3.js, Tableau, DataShop, LearnSphere

Programming
JavaScript, HTML & CSS, MySQL, React

Machine Learning
Python, NumPy, pandas, SciKit

Game Development
Unity, C#

Product Design
Sketch, InVision, OmniGraffle

CERTIFICATES

Deeplearning.ai
BDE1x: Big Data and Education
Game Development for Modern Platforms

AWARDS

METALS Merit Scholarship
Third Place, The 3rd China College Students' "Internet Plus" Innovation and Entrepreneurship Competition, Beijing region

PROJECTS

Capstone Project   Development Lead
Pittsburgh, PA
Client: Western Governors University   Jan. 2019 – present
- Conducting literature review, user interview and cognitive task analysis to identify challenges, opportunities and solution constraints in writing and ideating solutions
- Developing an online curriculum aiming at improving writing through iteration

Disaster Lab!
Pittsburgh, PA
Course Group Project, Design Educational Games   Mar. – May 2019
- In a team of three, developed a transformational 2D platformer game on Chemistry lab safety targeting at high school students
- Collected learning objectives from interviews with SMEs and standards published by the American Chemistry Society
- Created paper prototypes and conducted playtesting sessions

Online Learning Pathway Analysis and Visualization
Pittsburgh, PA
Course Group Project, Interactive Data Science   Nov. – Dec. 2018
- In a team of three, created a reusable pipeline to transfer log data into Sankey diagram visualization using Python and D3.js
- Analyzed the quality of dataset and conducted initial transformations in Python
- Identified improvements for course structure based on the patterns in visualizations

Cuttle Bot
Pittsburgh, PA
Course Group Project, Human AI Interaction   Nov. – Dec. 2018
- In a team of two, developed a web interface for a card game Cuttle with Angular 6
- Applied instructional dialogs and rewind functionality to help novice players learn to play with better strategies

Programming with Open-Source Hardware System
Pittsburgh, PA
Course Project, Educational Goals, Instruction and Assessment   Oct. – Dec. 2018
- Identified problems in a curriculum design based on previous research questionnaire
- Redesigned curriculum using Educational Goals, Assessment and Instruction framework

Introductory Spanish Course
Beijing, China (remote)
Course Group Project, E-Learning Design Principles and Methods   May – Aug. 2018
- Developed a 2-unit introductory Spanish course on the Moodle platform incorporating e-learning design principles
- Conducted A/B test on the effect of self-explanation principle with over 30 randomly assigned users
- Increased learning by 16%, reduced learning time by 11%

WORK EXPERIENCES

Educational Internship
Beijing, China
Beijing ChenJingLun High School   Oct. – Nov. 2017
- Designed instruction on graphical programming, using Arduino UNO and Mixly graphic programming software for grade 10 students
- Conducted statistical analysis on the effect of graphical programming compared to traditional programming on student's attitude towards programming courses

Curriculum Development Intern
Beijing, China
Youth.cn   Oct. 2016 – Nov. 2017
- Developed curriculum on speechmaking for grade 1-8 students, used by over 200 students
- Developed a learning management system for learner sign-up and achievements
- Designed a digital prototype of a mobile app on music and art skills teaching