# Shijie Zhu

Learning engineer with a background in computer science passionate about delivering evidence-based educational technology.

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### **SKILLS**

#### **Programming Language**

Python, Java, Ruby

#### Machine learning

Decision Trees, kNN, Linear Regression, Neural Networks, Deep learning

#### **Learning Science**

Cognitive Task Analysis Learning Curve Analysis Educational Data Mining Instructional Design

#### Web Development

HTML, CSS, Javascript, PHP, Bootstrap

#### Design & Media

Photoshop, Figma, Filmora

## **COURSEWORK**

- Intro to Machine Learning
- Practical Data Science
- Object-Oriented
  Programming in Java
- Programming for Online Prototyping
- E-learning Design Principles
- Tools for Online Learning

# **AWARDS**

- METALS Merit Scholarship 2019-2020
- National IoT Design
  Competition: Second Prize of the National Final 2018

#### **EDUCATION**

#### **Carnegie Mellon University**

Aug 2019 - Aug 2020

Masters of Education Technology & Applied Learning Science (METALS)

#### Wuhan University, China

Sep 2015 - June 2019

B.S. Computer Science and Technology

#### **PROJECTS & EXPERIENCES**

# Pangolin - A facilitative learning platform for programming education

Capstone project

Jan 2020 - Aug 2020

- Researched and investigated the current programming education market.
- Designed and iterated Pangolin, a learning platform for middle school programming education.
- Wrote algorithms for some project features.

#### Learning website - How do induction cookers work

Coursework Project - Tools for Online Learning Jan 2020 - May 2020

- Designed and built a website for teaching how an induction cooker works.
- Used the concept of Jigsaw and collaborative learning in learning science.

#### Diet bot

Coursework Project - Programming for Online Prototyping

Mar 2020 - May 2020

- A course project for the course Programming for Online Prototyping.
- Designed and built a conversational SMS bot to help users keep track of their diet information, which was built in Ruby with Sinatra.

#### Insights From Niche: What makes a good high school in NYC?

Coursework Project - Practical Data Science

Sep 2019 - Dec 2019

- Conducted text mining and data analysis based on text and other demographic data scraped from the niche.com website and gained interesting visualization and insights about the high schools in NYC.

#### **Off-By-One Error Tutor**

E-learning Design Project

Sep 2019 - Dec 2019

- Utilized E-learning design principles and conducted cognitive task analysis to design evidence-based online course module. 3 rounds of learner testing were done to refine course design and an A/B testing was done to evaluate an innovative design.