

Xinhe Zhang

🏠 xinhez.github.io | ✉ xinhez@andrew.cmu.edu | ☎ (+1)412-273-0270 | 📱 xinhez | 🌐 xinhez

EDUCATION

CARNEGIE MELLON UNIVERSITY M.S. IN ELECTRICAL AND COMPUTER ENGINEERING

Aug 2019 - Exp Dec 2020

Concentration in machine learning and neural engineering.

B.S. IN ELECTRICAL AND COMPUTER ENGINEERING | 3.68/4.0

Aug 2014 - May 2018

College Honor & University Honor

Dean's List 2014, 2015 & 2018

Concentration in software engineering and machine learning.

LEADERSHIP

CMU INNOVATION AND ENTREPRENEURSHIP ASSOCIATION

Advisor | May 2018 - May 2019

Co-President | May 2017 - Aug 2018

AI Panel and VR Panel Co-Director

- Recruited and managed over 100 members across 6 departments.
- Organized annual conferences featuring tech talks and startup competitions with over 1,000 registered audiences.
- Initiated the Silicon Valley chapter.
- Created and maintained partnerships with companies, media, and organizations.

MEMBERSHIP

IEEE-ETA KAPPA NU (HKN)

IEEE HONOR SOCIETY

Corresponding Secretary

Sigma Chapter | 2017-2018

Conducted all correspondence for the Sigma Chapter.

Elected Member

Sigma Chapter | Since 2016

SKILLS

AREA

Machine Learning · Web · Android

FRAMEWORK

TensorFlow · Keras

React · Angular

Redux · Express · Flask

WebGL · D3.js

PROGRAMMING

Python · Javascript · Kotlin

PROJECT

DIABETIC RETINOPATHY (DR) DETECTION Sep 2017 - Present

Created a pipeline consisting of a convolutional neural network that produces the transmission map and another convolutional neural network that classifies the map.

IMAGES FROM SIMULATOR TO TRAIN DEEP NETWORK Sep 2019 - Present

Use the simulators Carla to create synthetic images of objects in road scenes, with these images a deep network is trained to detect objects in real images.

SECOND LANGUAGE ACQUISITION MODELING Sep 2019 - Present

Given a history of token-level errors made by the learner in the learning language (L2), build a deep learning model to accurately predict the errors they will make in the future.

FIPASS Dec 2017 - May 2019

Built a full-stack web app for college career fairs and co-founded the start-up.

EXPERIMENTING TIME-SPACE-AWARE MEMORY FOR DEEP REINFORCEMENT LEARNING Mar 2018 - May 2018

Experimented on approaches towards improvements of memory structures for reinforcement learning.

QUESTION GENERATING AND ANSWERING SYSTEM Mar 2018 - May 2018

Generated questions and answers from given texts with natural language processing models.

EXPERIENCE

CARNEGIE MELLON UNIVERSITY

TEACHING ASSISTANT AND CRLA CERTIFIED LEVEL II: ADVANCED TUTOR

Feb 2015 - Present | Pittsburgh, PA

Organized review sessions and office hours for 100 students and graded their works.

GUANGDONG 999 BRAIN HOSPITAL

ASSISTANT INTERN Jul 2019 - Aug 2019 | Guangzhou, GD

· Participated in and brain cancer case discussions and assisted the associate dean with technology purchasing decision-making.

DUOLINGO, INC

SOFTWARE ENGINEER Nov 2018 - May 2019 | Pittsburgh, PA

- Collaborate with product and design teams to develop Duolingo on Android.
- Collaborated with the China team to implement Android push notification in China.

EXP II, INC

ENGINEER INTERN Aug 2018 - Nov 2018 | Pittsburgh, PA

Collaborated with the content team to improve SEO results as the sole engineer.

FACEBOOK, INC

SOFTWARE ENGINEER INTERN May 2018 - Aug 2018 | Seattle, WA

Designed and implemented a web app in React, GraphQL and PHP with user-specified parameters that can query from databases and collectively display the results.

GOOGLE, INC

SOFTWARE ENGINEERING INTERN May 2017 - Aug 2017 | Mountain View, CA

· Designed an data visualization tool and improved the frontend filtering method in Angular and D3.js for about 150 business and engineer monthly users.

ENGINEERING PRACTICUM INTERN May 2016 - Aug 2016 | Boulder, CO

- Implemented a C++ backend server and serves it to visualize geospatial data.
- Created an interactive web display of 3d geospatial data with WebGL and Maps API.