EDWARD HU

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EDUCATION

University of Texas at Austin *December 2016 - May 2020*
B.S. in Computer Science & Mathematics
GPA: 3.72

EXPERIENCE

University of Texas at Austin August 2016 - Present
Student Researcher *Austin, TX*

- Used OpenCV to detect the defects generated during 3D printing and halt the process if necessary.
- Construct artificially neural networks with multiple layers.
- Use gradient descent and genetic algorithms to optimze the performance of the ANN.
- Utilized numpy and matlibplot for the optimization and graphing tasks.
- Use Python to modify the Gcode file used to guide the 3D printing process.
- Use optimization methods to find the optimal solution to cut 3D printed object to reduce support structure required.

TECHNICAL EXPERIENCES

Projects

- *Minesweeper Optimization*: Used NEAT framework to implement ANN to improve the efficiency of minesweepers.
- *Character Recognizer*: Implement a two-layer neural network to improve its accuracy on predicting the hand-written digits.
- *File Compressor*: Used huffman coding method to compress a file, reduce the size of the file, and restore the compressed data.
- *Browser*: A browser for macOS that has basic function to browse webpages.

Extra curriculum

- Robotics Club: Compete in Region 5

Curriculum

- Data Structure, Intro to Computer Architecture, Intro to Computer Systems, Computational Intelligence in game AI.

TECHNICAL STRENGTHS

Computer Languages	Java, C/C++, Python, Swift, LaTeX, Matlab
Tools	Linux, Git, Vim, GCC, Docker, Intellij, Xcode
Languages	Chinese, English