

Tim Perr

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<https://github.com/tperr>

Profile

I am interested in many things, including high level programming (ex. Artificial Intelligence, Machine Learning) and low level programming (ex. Systems level programming, Assembly programming), and Scientific Computing (ex. Classification of stars using AI).

I program in Python, Matlab, R, C/C++, React.js, HTML/CSS/JS, SQL, PHP, Bash, MIPS assembly, Java, Swift.

Work Experience

02/2023 — present | Houghton, Michigan

Computer Science Research Assistant Michigan Technological University

Assisted in development website for Illuminated Devices. Work is supported by the National Science Foundation under Grant [#BCS-2122034](#).

09/2022 — 04/2024 | Houghton, Michigan

Computer Science Learning Center Coach Michigan Technological University

Assisted in the completion and understanding of Computer Science coursework at all levels of difficulty. Courses assisted range from intro level course to senior level courses.

09/2022 — 12/2022 | Houghton, Michigan

Computer Science Lab Assistant Michigan Technological University

Aided in instruction of Intro to Computer Science labs (CS1111, CS1131, CS1122).

05/2022 — 08/2022 | Lisle, Illinois

Instructor

iD Tech Camps

Plan and delivered curriculum to classes with up to 12 students, ensured all students set and reached curriculum goals. Supervised and kept entertained during non-instructional time.

10/2018 — 08/2021 | La Grange, Illinois

Bank Teller

First National Bank of LaGrange

Responsibilities included cashing checks, handling withdrawals/deposits, issuing cashiers checks and money orders, coin counting, balancing cash drawers and the vault, issuing license plate stickers, helping customers access safe deposit boxes, and helping with opening/closing the branch.

Education

08/2021 04/2024

Computer Science | Bachelor's degree Michigan Technological University

08/2024 12/2025

Computer Science | Master's degree Michigan Technological University

08/2024 12/2025

Data Science | Master's degree Michigan Technological University

Projects

Entropy Emulator

Objective: Make a simple emulator for a computer

- Program was coded in C++, and includes a non-complex Makefile
- Reads in a file consisting of different operations a computer can perform (Clock tick, memory load, CPU load) from command line input, and executes each operation with Assembly like operations along with the computer operations (Load/Save word, branches)
- Link to code: <https://github.com/tperr/Entropy-Emulator>

Fracture Detector

Objective: Use a neural network to detect fractures

- Final project for SAT5114 AI in Healthcare
- Implemented in Python using U-Net
- Trained using a dataset provided by [figshare.com](#)
- Link to code: <https://github.com/tperr/Fracture-Detector>

Certificates

08/2024

Essentials of Free and Open Source Software
Canvas Credentials (Badgr):

<https://api.badgr.io/public/assertions/EXNMMFfHTc271XLtj2oS1w>