Projects

Cell Classification with PyTorch

Implemented convolutional neural networks to classify microscopy cell images (malaria dataset). Preprocessed image data, trained deep learning models, and achieved promising accuracy in distinguishing infected vs. healthy cells. Explored transfer learning and hyperparameter tuning for performance improvement.

Algorithm Practice (Python + C)

Implemented classical algorithms and data structures in Python and C. Reinforced understanding of system programming, efficiency, and complexity trade-offs.

ESP32–Arduino IoT Temperature Control System (11/2024 - 02/2025) Developed a **temperature control system using ESP32 and Arduino, integrating sensors, and bidirectional communication. Implemented MQTT protocol on ESP32 for real-time data exchange with a remote server. Built an interactive web GUI using HTTP requests to control and monitor temperature remotely.**

Design Lint Bot

- Developed a bot to automatically lint design files (e.g., Figma/UX assets) and enforce style consistency.
- Integrated into development workflows for continuous checking.
- Improved collaboration efficiency by reducing manual review overhead.

Personal information:

Github: https://github.com/Jet1i