Shichang Ke

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https://gillksc.github.io/personal-site/

EDUCATION

Johns Hopkins University — Baltimore

Bachelor of Science: Neuroscience & Computer Science — Expected June 2023

- Dean's List for 6 finished semesters
- Relevant coursework: Machine Learning, Computer Networks, Data Structures, Automata & Computation Theory, Computer System Fundamentals

SKILLS

- Programming Languages: HTML, C/C++, Python, Java, JavaScript, CSS, Matlab, Assembly
- Tools & Frameworks: MongoDB, Express, React, Nodejs, Django, Scikit-Learn, Pytorch, Scipy, Tensorflow, Matplotlib, GIT, Jupyter Notebook, Wireshark

PROJECTS

THE DELINEO DISEASE MODELING PROJECT — May 2022 - Present

Fullstack Developer

- Maintained and updated the public website which uses the MERN stack
- Implemented responsive elements to the website using React bootstrap framework
- Maintained the servers where all data/code is stored, and made sure all the connections between the servers were functional

MACHINE LEARNING: LIVE TRANSLATION OF SIGN LANGUAGE — March 2022 - June 2022

Project Lead

- Built classifiers and object detectors, in Python, for images of various users and backgrounds for American Sign Language letters
- Improved model so it can preprocess raw videos of people making ASL alphabet gestures

DEEP LEARNING PIPELINE FOR NEURON DETECTION — September 2021 - January 2022

Independent Project

- Designed a deep learning pipeline for automatic analysis of neuronal activities in Ca+ imaging data
- Included an automatic image preprocessing step by using Matlab and ImageJ
- Researched on various open-source software and experimented on different parameters to finetune signal extraction pipeline for data of mice brain activity recordings

WORK EXPERIENCE

JOHNS HOPKINS UNIVERSITY — Baltimore

Research Assistant - The Mysore Lab — September 2021 - Present

- Examined Fluorescence imaging data, fine-tuned pipeline for lab's data
- Debugged the MERN stack used for experimental data collection
- Conducted mice behavioral training on visual-spatial attention

COMMUNITY INVOLVEMENT

MEDHACKS — March 2022 - Present

Web Design

- Created logos and posters using Adobe Photoshop & Illustrate, Figma
- Collaborated with front-end team to created and design main site for 2022 Medhacks