Meryl Wang

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Education

Massachusetts Institute of Technology
Cambridge, MA
B.S. in Computer Science June 2020
Relevant Coursework: Software Studio, Linear Algebra, Algorithms, Machine Learning, Computational Photography, Oral Communications, Multimodal User Interfaces

Experience

Ovation.io: a Laboratory Information Management System platform *Cambridge, MA*
Software Engineer Intern Jun – current
- Designed and implemented batch upload & download features via CSV import & export
- Added re-usable CSV validator to check import CSV files & display helpful error messages
- Employed Ruby on Rails / EmberJS stack

ConquerX: Metachip for Early Cancer Detection *UMass Boston*, MA
Software Development Intern Jun – Aug 2018
- Built an interactive web-app that ranks biomarkers by values (sensitivity, specificity, etc.) based on user criteria (e.g. cancer type), helping the lab select biomarkers that respond to presence of cancer.
- Data-scraped biomarker databases (NIH Genomic Data Commons, dbDEMC 2.0) with Python Selenium and organized data via MongoDB

National Cancer Institute *Ft. Detrick*, MD
Research Intern Jun 2015 – Aug 2017
- Studied effects of antibody humanization on physico-chemical properties of antibody-antigen protein-protein interactions. Curated datasets using databases (Protein Data Bank, DrugBank)
- Published research article describing results of study. Cited in further antibody design studies
- Applied UNIX Shell scripts to analyze protein models via bioinformatics software (Virtual Molecular Dynamics)

Leadership/ Activities

MIT Asian Dance Team *Cambridge*, MA
Technical Director Jan 2018 – Jan 2019
- Organized technical logistics for semesterly showcases (space, staffing, lighting, audio, etc.)

Projects

Karaoke Apr 2019
- Developed an audio-gesture controlled karaoke web-app using Javascript and HTML/CSS
- Used YouTube API for music, Google Web Speech API for audio recognition, Leap Motion Sensor SDK for gesture recognition

Emojo Jan 2019
- Implemented Emojifier, a feature that replaces text with matching emojis
- Utilized web-scraping, MongoDB, and Node.js

Skills

Programming Languages: Python, Java, C++, Ruby
Web Dev: Javascript , Python Selenium, Node.js, Ember.js, Rails
Other Technologies: MongoDB, Git, LaTeX
Language: Fluent Chinese, English

Publication

Wang M, Zhu D, Zhu J, Nussinov R, Ma B. Local and global anatomy of antibody-protein antigen recognition. *Journal of Molecular Recognition*. 2017;31(5).