

## SKILLS

- Java, C, Python, MATLAB, javascript, Swift, HTML/CSS, SQL/sqlite, C++, React, flask, GO, shell
- Data structure and algorithms, Object Oriented Programming, data analysis, machine learning, REST API
- Fluent in English and Chinese

## EDUCATION

### Purdue University, West Lafayette

May 2022 (Expected)

- B.S. Computer Engineering, Minor in Mathematics, Minor in Business Economics
- GPA: 3.99, Honors College
- Eta Kappa Nu: the honor society of IEEE
- Awards: Dean's List & Semester Honors (All semesters at Purdue)
- Study Abroad: Dublin, Ireland - May 2019
- Learning Community: Purdue University Global Engineering - Fall 2018

## EXPERIENCE

### Purdue University Teaching Assistant

- ECE 36800 (Data Structure) Aug 2020 - PRESENT
- ECE 26400 (Advanced C Programming) Jan 2020 - May 2020
  - Work closely with professors and faculty members to supervise and tutor 200+ students.

### Clique: Spatialtemporal Object Re-identification at the City Scale

May 2020 - Dec 2020

- Co-author on computer vision/data analysis project, published at USENIX symposium ODSI'21 (<http://arxiv.org/abs/2012.09329>).
- Developed a new query processing engine for object reidentification problems with large scale video data that is competitive in accuracy and advantageous in run time compared to existing algorithms.

### Data Analytics for Cancer Diversity and Correlation

Jan 2020 - Aug 2020

- Participated in the interdisciplinary research project that looks to develop a model for identifying cancer subtypes using TCGA's clinical and molecular data.
- Develop a multi-view co-clustering model on RNA sequence data to identify molecular clusters.

## PERSONAL PROJECTS

### What2wear- <http://www.kaiwenshen.com/what2wear/>

Aug 2019 - PRESENT

- Developed web page that retrieves location and weather data of different cities (user input) using APIs then presents to users what types of clothes to wear in order to stay warm/cool.

### NBA Prediction - [https://github.com/k-shen/NBA\\_pred](https://github.com/k-shen/NBA_pred)

Jun 2020 - PRESENT

- Created a growable NBA dataset using various categories of team data and records retrieved from basketballreference.com.
- Utilized Tensorflow Keras Sequential Neural Network and Ridge regression to predict game result and winning margin.

## LEADERSHIP

### Purdue Student Engineering Foundation - Director

Feb 2020 - PRESENT

- *Tech Committee Director*: oversee operations of the technology committee of PSEF, maintain the PSEF website <https://engineering.purdue.edu/PSEF/>, assists other committees in technological areas.
- Lead engineering campus tour for prospective students and family and facilitate outreach events for high school students to engage interest in the engineering field.

### Purdue Honors College Global House - Mentor

Jul 2020 - PRESENT

- International community within the Honors College with focus on cultural inclusion.
- Provide mentorship and leadership to domestic/international honors students, especially under the pandemic situation.