

# Kangyu Feng

+1 (217)-530-8848 | [kangyuf2@illinois.edu](mailto:kangyuf2@illinois.edu) | 310 E Springfield Ave, Apt 1807, Champaign, Illinois, 61820

## EDUCATION

---

### University of Illinois at Urbana-Champaign

Aug. 2020- Present

*Bachelor of Science: Computer Science in Grainger Engineering*

Overall GPA: 3.96/4.0

Deans List: Fall 2020, Spring 2021, Fall 2022, Spring 2022

Related Course: Data Structures (A+), Numerical Methods I (A+), Database Systems (A), Algorithms (A), System Programming (A+), Data Mining (A), Artificial Intelligence (In progress), Machine Learning (In progress)

## TECHNICAL SKILLS

---

**Programming Languages:** Python, Java, C++

**3D Development:** Unreal Engine 4

**Theoretical Knowledge:** Data Structures, Algorithms, Databases (MySQL), Data Mining, Machine Learning

## RELATED EXPERIENCE

---

### GATE Project - Updating CS 101 to Meet Current College Meets

Sept. 2023 - Present

*Research Assistant*

*Supervisor: Mariana Silva, Teaching Associate Professor*

*Mattox Beckman, Teaching Associate Professor*

- Interviewed with professors from other departments, discussed the new content for CS 101 as a service course
- Developed new questions, created a new course syllabus, migrated the course content that was hosted on Relate to Prairielearn

### Discover AI & Apply AI Program

Mar. 2022- Dec. 2022

*Participant*

*Mentor: Suhani Vora, Google researcher*

- Engaged in studying artificial intelligence, gaining knowledge of foundational models and concepts.
- Collaborated with students from different universities and completed a project under the guidance of a mentor employed at Google.
- Utilized real estate data (900K) from the United States (2017-2020) to construct a linear regression model that predicts property prices based on property size and area.

### Women in Computer Science

Feb. 2022- Apr. 2022

*Project Designer*

*Supervisor: Hongye Liu, Teaching Assistant Professor*

- Utilized Python's BeautifulSoup4 library to scrape all information from the school's course website.
- Employed SQLite3 to store and manage course information as well as student account details.
- Utilized React to build the front end, designed webpages, the layout, and the appearance of the website.

### Study on the application of deep learning in image recognition system

Sept. 2018- Jan. 2019

*Research Assistant*

*Supervisor: Wei Li, Professor*

- Coded and learned in the related field under the guidance of professors at Fudan University.
- participated in intensive training on Python, Tensorflow, Multilayer perceptron, Convolutional Neural Network (CNN), feedforward neural network (FFNN), Generative Adversarial Network (GAN), and so on
- Successfully built an image recognition program that can recognize and generate writing numbers

## TEACHING & ADVISING

---

### CS 519: Scientific Visualization

*Course Assistant*

May. 2023 – Aug. 2023

- Contributed to course content development, primarily focusing on designing and developing Python programming-related problem sets.

- Monitored the course forum and provided assistance with Python-related questions and clarifications.

**CS 357: Numerical Methods I**      *Course Assistant*      Dec. 2022 – Present

- Assisted the professor during class sessions, facilitating group activities and providing student support. Conducted weekly in-person office hours to address questions regarding course materials, assignments, and machine projects.
- Contributed to course content development, created and reviewed coding questions for quiz

**ACM's Mentorship Program**      *Mentor*      Jun.2022 – Dec. 2022

- Provided one-to-one mentorship to a new coming student, answered student's questions about major, course selection, and college life

**CS 124: An Introduction to Computer Science**      *Course Assistant*      Aug. 2021- Dec.2021

- Got CA training course (CS 199-CA), learning how to become a good CA
- Taught students in CS 124, instructed students to complete their homework and answered their questions in the online meeting.

## INTERNSHIP

**Kali Technology (Shanghai) Co.**      Jun. 2023 – Aug. 2023

*Technology Department Intern*      Shanghai, China

- Developed section of AI Q&A Assistant, including Calling the API from XunFei AI LLM, adjusting the model to fit scenarios of the logistics app, and designing the corresponding user interface
- Participated in the construction of the Knowledge Base, a file system that clearly display the application framework and show the usage of functionality, to clearly display the framework of the app for users
- Assisted in debugging for the application, ensured the app's functionality was consistent with design requirements

## ORGANIZATION

**UIUC Chinese Engineering Student Association (CESA)**      Jan. 2023 - Present

*Public Relations/Outreach Department Member*

- Sought for collaboration with companies, secured \$3,000 in sponsorships for CESA
- Helped to organize the main event for the organization, including transfer major conference
- Promoted the organization in organization events, encouraged the joining of new member

## PROJECT

**CardColony**      Oct. 2022 – Dec. 2022

A Stacklands-like game developed on Unreal Engine 4 that included a complete currency and time system and card logic that gave users a high degree of freedom to drag and drop cards to form a card stack.

- Designed and developed the initial game interface and the in-game store interface
- Implemented card dragging and snapping logic, allowing players to allocate resources by controlling cards with the mouse
- Designed and developed time and currency systems, implemented the ability for players to sell existing cards for currency and trade card packs.

**UIUC Course Registry**      Oct. 2022 – Dec. 2022

A web application that aimed to combine the functionality of course information website and student enrollment website, supported by an over self-designed database system.

- Implemented the main functionality of the website such as multi-constraints courses searching, student enrollment, and batch operation for administrators
- Designed the database system that contain 6 tables with interconnected relations, contained at least 1000+ rows for each table and 50000+ rows in total
- Used Python as backend language and SQL query to manage the database

**Open Flight Data Analysis**      Oct. 2021 – Dec. 2021

A graph-based program containing the BFS algorithm, PageRank, and Dijkstra algorithm with visualization

functionality to show the connection between the airports

- Utilized airport's latitude and longitude as location, implemented the Dijkstra algorithm to find the shortest path between the worldwide airports
- Visualized the path of the airline using the equirectangular projection world map, showed connection given one airport or the shortest between 2 airports

## **VOLUNTEERING EXPERIENCE**

---

### **SISUBS Foundation**

Jan. 2020- March. 2020

- Communicated with local government and organized to donate medical supplies to the remote area to fight against the Covid-19 epidemic in China.
- Organized to donate 2000 Medical Rubber Gloves and 1600 Medical Masks to the People's Hospital in Jiangyong County, Hunan Province. The value of supplies is a total of ¥ 8554(RMB, about \$ 1353).

### **Shanghai Beautiful Mind Foundation**

Jun. 2019 - Aug. 2019

- Managed the foundation's database, recording and tracking data pertaining to underprivileged children, provided analysis of financial data, worked on statistics on the foundation's income and expenditures
- Delivered academic support to economically disadvantaged students, offering a total of 40 hours of instruction in Mathematics and Physics, facilitated a smoother transition into the new semester, empowering students to excel in their learning journey