Kunyi Wang

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TECHNICAL SKILLS

- **Programming Languages:** C++, C, Python, Java, TypeScript/JavaScript, CSS, HTML
- **Databases:** Redis, SQLite, MySQL
- **Technologies & Frameworks:** Node.js, Jenkins, Git, Spring Boot, React

EXPERIENCE

- **Research Assistant**   KAUST, Saudi Arabia
  Computational camera End2End design   *July 2023 - Now*
    - work in an interdisciplinary team to develop new camera systems in one of the application domains.

PROJECTS

- **KnowNet**
  JavaScript, React, Express, MongoDB, Node   *May 2023 - Now*
    - Integrated API requests and data manipulation techniques to fetch and display the appropriate items for each page,ensuring a seamless browsing experience for users.
    - Designed several React components together with Redux to build a comment board.
    - Used Tallwind CSS to improve the styles of the Website

- **InsightUBC**
  TypeScript, JavaScript, Express, HTML/CSS   *Jan 2023 - Apr 2023*
    - A full-stack web application that lets students find information about courses and resources on campus
    - Developed a **REST** API to connect the frontend and backend
    - Wrote a query parser to retrieve data from hard drive to provide rich functionality in searching
    - Used **TypeScript** for the backend and JSON files to store the data based on Node.js engine
    - Used automated unit testing framework **Mocah** and **Chai** to find bugs and prevent regression
    - Used HTML, TypeScript and CSS to develop a user-friendly front-end interface where users can easily navigate and take only 3 steps to complete the tasks

- **Photo Editing tools**
  C++   *March 2022 - June 2022*
    - Used pixel pointers to manipulate PNGs in C++
    - Utilized stacks, queues to flood fill various images using BFS search
    - Constructed and rendered PNGs using 2-D linked lists
    - Leveraged binary trees to flip and prune images with tree traversals

- **Canadian Immigration Database**
  PHP, HTML/CSS, SQL   *Oct 2022 - Dec 2022*
    - Employed normalization techniques to transform relational schemas into Boyce-Codd Normal Form (BCNF), thereby minimizing data redundancy, and subsequently generated corresponding SQL statements to ensure optimal database functionality.
    - Implemented an interactive web-based application in PHP and HTML, hosted it on UBC server and connected it to Oracle Database

EDUCATION

- **University Of British Columbia**   Vancouver, BC
  Bachelor of Science in Honours Computer Science and Mathematics (Double Major)   *Sep 2020 - Present*
    - Average: 90.3/100
    - Trek Excellence Scholarships 2021 (for top 5% students)