# Kai Tang Sundararaj

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### **EDUCATION**

Carleton University | Ottawa, Ontario

B.S. in Computer Science, Software Engineering Stream | GPA: 4.0/4.0 | CGPA 12.0/12.0 (A+)

Graduating May 2026, Fourth Year Student, Available for 4 to 12 months starting in January 2025

Relevant Courses: Data Structures/Algorithms, Web Applications, Systems Programming, Database Management

#### AWARDS AND EXTRACURRICULARS

Carleton University Top Entrance Scholarship: Entrance scholarship for having over 95% average in high school **John R. Pugh Scholarship of Excellence:** For being the top student in my year within the computer science department **Varsity Badminton Team**: Play men's doubles for Carleton's varsity badminton team.

Carleton Dean's honour list: 2021-2022, 2022-2023, 2023-2024

#### PROFESSIONAL EXPERIENCE

## Software Developer | Crypto4a Technologies

**Fall 2023** 

- Refactored old C code to be more efficient and take less storage for the firmware team.
- Used Open API, Maven, MongoDB, and Java to write a REST API inbox service and the backend code behind
  it for the cloud team where users could send, receive, accept, decline, query, and set expiry dates for invitations
  to other users.
- Wrote tests for MongoDB storage drivers as well as ledger and inbox services using Junit.
- Gained experience working in an agile development environment

#### **Teaching Assistant (3 terms) | Carleton University**

Summer 2023, Winter 2024, Fall 2024

- Graded over 400 assignments, working in a Linux environment using a virtual machine.
- Communicated with other TAs to divide up work and help each other if needed.
- Held office hours every week and helped mentor over 100 students on how to overcome their coding problems.

#### **PROJECTS**

#### Art Gallery | JavaScript, HTML/CSS, Node.js, Express, MongoDB

May 2023

- Developed a full stack project to create a web application where users could make an account, log in, view and search artworks by keyword, name, or artist name. Users could also follow artists, become an artist, post art, like and review artworks, create workshops, view profiles, and receive notifications about artists they follow.
- Built an express server to gather information from the user and communicate with the MongoDB database.
- Implemented RESTful API design to communicate with my server effectively.

## **Elevator Simulation | C++, QT**

January - February 2024

- Used C++ to develop an elevator simulation and mimic the behaviour of a building's elevator system
- Made use of QT to display a GUI where users could play with the different elevators and floors to see the outcome
- Utilized a PostgreSQL database to store information about the elevator system
- Used a distributed control system to determine which elevators are assigned to which floors

#### TECHNICAL SKILLS

- Programming Languages: C, C++, Java, Python, Javascript, HTML/CSS, Haskell, Prolog
- Other Technologies: Git, GitHub, Linux, Node.js, Express, React, SQL, MongoDB, Word, Excel, PowerPoint, Outlook
- Interests: Badminton, Piano, Reading, Video Games, Board Games
- Languages: EN, FR, Conversational Chinese