David Xu

SOFTWARE ENGINEERING · UNIVERSITY OF WATERLOO

Education

University of Waterloo

Waterloo ON, Canada

BACHELOR OF SOFTWARE ENGINEERING

Sept. 2020 to Apr. 2025

· Currently in first year second term; Cumulative GPA: 96.6

Skills

Languages JavaScript, Python, CSS, HTML, SQL, C, C++, Java Frameworks/Tools React, Node.js, Git, PostgreSQL, Heroku, Flask

Projects_____

ANTI-RONA LOCK SYSTEM 🖸

Oct. to Dec. 2020

- Integrated computer vision and machine learning software using Python.
- Derived and implemented the **algorithms** for distance computation in Python.
- Designed and implemented a graphical user interface using Tkinter.
- Communicated effectively with everyone in the team to coordinate the project.

CHESS C May to June 2019

- Developed original move validation **algorithms**, checkmate logic, et cetera.
- Built from scratch with **Java** and **object-oriented programming** principles.
- Created a complete graphical user interface with movement animations using Java's Swing toolkit.

Website 🗹 Jan. 2021 to Present

- Implemented a theme switcher using CSS and JavaScript.
- Constructed from scratch and deployed to **GitHub Pages**.

Bug Tracker ☑ Mar. 2021 to Present

- Developed a bug tracker in **Python** using the **Flask** framework and deployed to **Heroku**.
- Used **PostgreSQL** to manage the database and **SQLAlchemy** to query it.

Awards_____

DEAN'S HONOURS LIST 202.

· High GPA and ranking

UWATERLOO PRESIDENT'S SCHOLARSHIP OF DISTINCTION 2020

• 95+ admission average

AP Scholar with Distinction 2020

• 5/5 on all AP exams

• Top 1% of 24,709 contestants

CAYLEY (MATH) CONTEST SCHOOL CHAMPION

2018